```
February 27, 2003, 14:15:13 ; Search time 35 Seconds
(without alignments)
137.058 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / SIDS2/ggdatz/geneseq/geneseqp-emb1/AA1989.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1989.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1991.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1991.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1992.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1993.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1993.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1995.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1995.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1995.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1999.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1999.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1999.DAT: *
| SIDS2/ggdatz/geneseqg-emb1/AA1999.DAT: *
| SIDS2/ggdatz/geneseqg-emeseqg-emb1/AA1999.DAT: *
| SIDS2/ggdatz/geneseqg-emeseqg-emb1/AA1900.DAT: *
| SIDS2/ggdatz/geneseqg-emeseqg-emb1/AA2001.DAT: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1980. DAT:*/SIDS2/gcgdata/geneseqp-emb1,AA1981. DAT:*/SIDS2/gcgdata/geneseqp-emb1,AA1981. DAT:*/SIDS2/gcgdata/geneseqgp-emb1,AA1981. DAT:*/SIDS2/gcgdata/geneseqg-emeseqp-emb1,AA1981. DAT:*/SIDS2/gcgdata/geneseqg-emeseqp-emb1,AA1983. DAT:*/SIDS2/gcgdata/geneseqg-emeseqgp-emb1,AA1985. DAT:*/SIDS2/gcgdata/geneseq/geneseqp-emb1,AA1985. DAT:*/SIDS2/gcgdata/geneseqg-emb1,AA1987. DAT:*/SIDS2/gcgdata/geneseqg-emb1,AA1987. DAT:*/SIDS2/gcgdata/geneseqg-emb2,AA1987. DAT:*/SIDS2/gcgdata/geneseqg-emb2,AA1987. DAT:*/SIDS2/gcgdata/geneseqg-emb2,AA1987. DAT:*/SIDS2/gcgdata/geneseqg-emb1,AA1987.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     908470
5.1.3
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 908470 segs, 133250620 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
   GenCore version
Copyright (c) 1993 - 2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                  OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A_Geneseq_101002:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                    US-09-634-363-2
194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database
                                                                                                                                                                                                   Run on:
```

OF TANKES		Description						AAY87961 Human neuropeptide				AU85987 Modified human pep
		01	.5 A	7 A	4	0 A	1 A	11 A	1 A	22 A	2 A	3 4
		h DB	6 1	9	6 1	9	6 2	9	9	•	9	9
		Lengt	3	સ સ	ĕ	ĕ	ĕ	36	ř	ĕ	36	ř
ď	, Query	Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		Score	194	194	194	194	194	194	194	194	194	194
	Result	NO.	1	7	m	4	S	9	7	80	6	10

Amino acid sequenc Human colon cancer Parathyroid hormon Peptide YY SEQ ID Porcine peptide YY Peptide YY SEQ ID Porcine peptide YY Peptide YY SEQ ID Porcine peptide YY Peptide YY SEQ ID Porcine small interpeptide YY analogu Porcine small interpeptide YY analogu Porcine small interpeptide YY analogu Porcine meuropeptide Y ago Pancreatic polypep Porcine neuropeptide Porcine neuropeptide Porcine neuropeptide Porcine Neuropeptide YY analogu Human neuropeptide Human neuropeptide Human neuropeptide Human neuropeptide Human neuropeptide	Neuropeptide r pep Mammalian neuropep Modified human neu Neuropeptide r. S Human prepro-neuro Human neuropeptide Human neuropeptide
21 AAB08020 22 AAG75364 22 AAB91109 22 AAB91226 15 AAR52049 18 AAW15365 19 AAW15365 22 AAB91225 22 AAB91225 22 AAB91224 11 AAR07277 22 AAB91224 3AR07277 3AR07274 3AR07274 3AR07274 3AR07274 3AR07274 3AR07274 3AR07274 3AR07274 3AR07742 3AR07620 3AR07742	
9 C W W W W W W W W W W W W W W W W W W	777000
	144 1444 1444 17444 17444
111 112 113 114 115 116 117 118 118 119 119 119 119 119 119 119 119	3 0 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

ALIGNMENTS

Peptide YY, PYY, gastro-enterological disorders; intestinal water; electrolyte secretion; cell proliferation; nutrient transport; lipolysis; blood flow regulation. New peptide derivs. - useful as therapeutic agents, for treating gastro-enterological disorders AAR62050 standard; peptide; 36 AA. 93US-0038534. 94WO-US03380 14-JUN-1995 (first entry) (UYCI-) UNIV CINCINNATI. Human peptide YY (PYY). WPI; 1994-332815/41. Balasubramaniam A; 29-MAR-1993; 19-AUG-1993; Homo sapiens 29-MAR-1994; WO9422467-A. 13-OCT-1994 AAR62050; RESULT 1 AAR62050 THE STATE OF THE S

pp

ò

```
WPI; 1998-322327/28.
                                                                                                                        Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Balasubramaniam A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36 AA;
                                                                      36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                             Human peptide YY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9820885-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36;
                                                                                                                                                                                                                                                                                                                                        AAW51801;
                                                                      Sequence
                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                 AAW51801
                                                                                                                                                                                                                                                                                                                      88888
                                                                                                                                                                             δy
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR97740 and AAR97741 represent porcine and human peptide YY (PYY) respectively. This sequence is isolated from intestine, and is localised in the endocrine cells of the gastrointestinal tract and the pancreas. PYY is thought to inhibit gut motility and blood flow, to mediate intestinal secretion, and stimulate net absorption. These sequences, and aganists against them (see AAR97744), can be used in the method of the invention. The method of the invention is for inhibiting pancreatic tumours by contacting them with an effective amount of one of these sequences. The method is effective in treating both benign and malignant pancreatic tumours. The types of benign tumour pancreatic tumours include, serous cyst adenomas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide YY; PYY; porcine; human; intestine; endocrine cell; gut motility; gastrointestinal tract; pancreas; inhibitor; intestinal secretion; pig; pancreatic tumour; blood flow; serous cyst adenoma; microcystic tumour; solid-cyst tumour; malignant tumour; therapy.
                                                                                                                                                                                                                                                                                                                                        Gaps
                                            AAR62050 describes the amino acid sequence of human peptide YY (PYY), which was isolated from the endocrine cells of the human gastrointestinal tract and pancreas. Using the equivalent porcine PYY sequence (AAR6204) as a base the PYY analogues described in AAR62051-R62082 were produced. The new peptides were found to have a variety of properties, that made them useful as therapeutic agents in the treatment of gastro-enterological disorders. As part of a therapeutic composition they could be used for decreasing
                                                                                                                                                                                          excess intestinal water and electrolyte secretion, for regulating cell proliferation and augmenting nutrient transport, and for regulating lipolysis and blood flow.
                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Use of peptide YY and its agonists to treat pancreatic tumours either in vitro or in vivo to reduce tumour cell proliferation
                                                                                                                                                                                                                                                                                                 Length 36;
                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                   Score 194; DB 15;
Pred. No. 2.7e-20;
                                                                                                                                                                                                                                                                               100.0%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                         36
                                                                                                                                                                                                                                                                                                                                                                                          1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY
              Disclosure; Page 3; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR97741 standard; peptide; 36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 3; 22pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95WO-US14303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US÷0338395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (REGC ) UNIV CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1996-259558/26.
                                                                                                                                                                                                                                                                                                                Local Similarity
nes 36; Conserv
                                                                                                                                                                                                                                                                36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human peptide YY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9614854-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcfadden DW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR97741;
                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR97741
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to peptide YY analogues which may be used e.g. for decreasing excess intestinal water and electrolyte secretion in mammals, to regulate cell proliferation (especially intestinal cell proliferation), to increase nutrient transport, to regulate lipolysis and to regulate blood flow. The peptides exhibit antisecretory and antimotility properties and are especially useful in treatment of gastrointestinal disorders associated with excess intestinal electrolyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and water secretion as well as decreased absorption. The new peptides are truncated versions of peptide YY. They interact solely with peptide YY receptors and not with homologous receptors such as NPY XI and Y3, thus minimising unwanted (ant)agonist side reactions. The present sequence represents human peptide YY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide YY; cell proliferation; nutrient transport; lipolysis; electrolyte secretion; anti-secretory; intestinal water; antimotility.
                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
microcystic tumours, and solid-cyst tumours. The malignant tumours capable of being treated by the method of the invention include, carcinomas arising from the ducts, acini, or islets of the pancreas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New analogue(s) of peptide YY - used, e.g. to control cell proliferation, nutrient transport, lipolysis and intestinal water
                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                  Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 36;
                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 194; DB 19;
100.0%; Pred. No. 2.7e-20;
iive 0; Mismatches 0;
                                                                                                                                                                                                     DB 17;
                                                                                                                                                                                                                                    Pred. No. 2.7e-20;
                                                                                                                                                                                                                                                                                                                                 1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                      1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                     Score 194;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 3; 54pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA
                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW51801 standard; peptide; 36
                                                                                                                                                                                                  100.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96WO-US18374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96WO-US18374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-OCT-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and electrolyte secretion
                                                                                                                                                                                                                                                                  36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYCI-) UNIV CINCINNATI.
```

```
NPY; NPY-Y4 receptor; precocious puberty; polycystic ovary syndrome; endometriosis; benign prostatic hyperplasia; delayed puberty; amenorrhea; breast cancer; prostate cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating human reproductive disorders such as amenorrhea, delayed puberty, polycystic ovary syndrome and endometriosis, comprises administering a neuropeptide Y-Y4 receptor ligand -
                                                                                                                                         Human; neuropeptide Y; luteinizing hormone; reproductive system;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 2; 17pp; English.
                                                       20-JUN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-399931/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FERR ) FERRING BV.
                                                                                                                                                                                                                        peptide YY; PYY
                                                                                                                                                                                                                                                                                                                                                                                   WO200030674-A1
                                                                                                  Human peptide
                                                                                                                                                                                                                                                                                                                           Modified-site
                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-NOV-1998;
13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                              02-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Broqua P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                 AAB12178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents peptide Y (PPY). The invention relates to neuropeptide (1a) of 3-10 amino acids (aa) in which at least two cyclic peptide (1a) of 3-10 amino acids (aa) in which at least two residues are joined by a naphthyl ring; and (ii) at least tone linear peptide (1b) of 12-37 aa, bound to (i). The agonists, also NPY itself, the related sequence PYY and PYY agonists, are used to reduce airway restriction in patients with bronchists, are used to reduce airway restriction in patients with bronchists, are used to reduce airway restriction in patients with bronchists, are used to reduce airway restriction in patients with bronchists, are used to reduce airway restriction in patients with bronchists, conditions connary arterial disease, diminished cardiac vagal activity, coronary arterial disease, diminished cardiac vagal activity, myocardial infarction, acquired immune deficiency syndrome and diseases characterised by reduced immune responses; and (ii) to increase body weight or as an antihistamine. The template induces folding of (Ib) into a biologically active form. Since (1) contain only the C-terminal region of NPY, they are selective for the Y1 receptor.
                                                                                                                                                                                                                Neuropeptide Y; NPY; agonist; peptide YY; PYY; airway restriction; bronchial disease; asthma: bronchiis; laryngitis; Alzheimer's disease; chronic rhinosinusitis; oedema: inflammation; congestive heart failure; cardiomyopathy; coronary arterial disease; myocardial infarction; AIDS; diminished cardiac vagal activity; hypertension; epilepsy; ischaemia; angina; immune response; antihistamine; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      i, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New agonists of neuropeptide Y containing linear peptide linked cyclic template peptide, used e.g. to reduce airway restriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 100.0%; Score 194; DB 20; Best Local Similarity 100.0%; Pred. No. 2.7e-20; Matches 36; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    щ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 42; 45pp; English.
                                                     AAY43335 standard; peptide; 36 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Grouzmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-EP02076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0054393
                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lacroix J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BMRA-) BMRA CORP BV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-620192/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                        W09951626-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-APR-1998;
                                                                                                                                     25-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                               14-OCT-1999
                                                                                                                                                                             Peptide Y.
                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mutter M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seguence
                                                                                              AAY43335;
                           AAY43335
```

Hayward A;

×

Akinsanya

98GB-0025969. 99WO-GB03963

/note= "C-terminal amide" Location/Qualifiers 36

```
ö
Neuropeptide Y (NPY) (AAB12177) has a number of effects on the reproductive system. NPY is one of a family of neuropeptides. Other members of the family include the present sequence, peptide YY (PYY), and pancreatic polypeptide (PP, See AAB1219) and AAB12180). Selective NPY-V4 receptor agonists have been found (see AAB12181 to AAB12183). The NPY-V4 receptor agonists cause an increase in the circulating levels of compromised reproductive function. The NPY-V4 agonists may be used to treat human reproductive disorders such as delayed puberty and amenorrhea. In addition, NPY-V4 antagonists may be used to treat human reproductive disorders such as precocious puberty, endometriosis, polycystic ovary syndrome, benign prostatic hyperplasia and hormonne-dependent neoplasias e. 9. breast cancer and prostate cancer. The present sequence was used in a sequence homology comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 194; DB 21; 100.0%; Pred. No. 2.7e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ¥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY87961 standard; peptide; 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
les 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                  36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY87961;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
AAY87961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        XXXX
```

ö

Gaps

; 0

Indels

AAB12178 standard; peptide; 36

RESULT 5

g ò

AAB12178

31-MAY-2000

```
The invention relates to novel peptide YY (PYY) analogues

(AAY87551-Y87564 and AAX87568) that can be used for the treatment of

astrointestinal disorders. PYY (AAY87559, ARY87550) is a 36 residue

C gastrointestinal disorders. PYY (AAY87559, ARY87550) is a 36 residue

peptide amide that is released into the circulation after a meal and

which is thought to play a role in regulating intestinal secretion and

c absorption. It binds to a receptor on intestinal epithelial cells, and

inhibitor of diarrhoea. PYY has also been implicated in nutrient uptake,

c inhibitor of diarrhoea. PYY has also been implicated in nutrient uptake,

cc call proliferation, lipolysis and vasconstriction. The compounds of the

invention are useful for inhibiting fluid and electrolyte secretion in

the small intestine; augmenting nutrient transport; increasing cell

consumple, adipose tissue; and regulating blood flow in mammals. The

cre example, adipose tissue; and regulating blood flow in mammals. The

analogues are especially useful in the treatment of gastrointestinal

cc for example, adipose tissue; and regulating blood flow in mammals. The

canalogues are especially useful in the treatment of gastrointestinal

cc disorders associated with excess intestinal electrolytes and water

cc disorders associated with excess intestinal diarrhoea, diarrhoea due to

condiarrhoea following ileostomy. The peptides can also be used to treat

cc diarrhoea following ileostomy. The peptides can also be used to treat intestinal

cd socrater, e.g., after surgery or due to cholers and to treat intestinal

cd dysfunction in patients with AIDS, especially those with cachexia. As

can emergency or life-threatening situation involving a gastrointestinal

cd diarrhoea following ileostomy. The peptides can also be used to treat

cd patients with AIDS, especially those with eachexia. As

can emergency or life-threatening situation involving a gastrointestinal

condiarrhoea phore a porter than naturally occurring or with receptors

condiarrhoea phore and per
                                                                                                                                                                                                                                                                                                                                            New peptide YY analogs especially useful for treating gastrointestinal disorders associated with excess intestinal electrolytes and water secretion, and decreased absorption, e.g. infectious and inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protection, endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        side reactions. The present sequence represents human PYY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 194; DB 21;
ilarity 100.0%; Pred. No. 2.7e-20;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Column 2; 18pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB91223 standard; Peptide; 36 AA
                                                                              980S-0047986
                                                                                                                                98US-0047986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide YY SEQ ID NO:397.
                                                                                                                                                                                  (UYCI-) UNIV CINCINNATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
nes 36; Conserv
                                                                                                                                                                                                                                        Balasubramaniam A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36 AA;
                                                                           25-MAR-1998;
                                                                                                                                25-MAR-1998;
                         04-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB91223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                   diarrhea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB91223
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes the novel use of a composition containing a neuropeptide Y (NPY) Y4 receptor ligand for treatment of human reproductive disorders. The products described in the invention have endocrine, gynecological and cytostatic activity and can be used for the treatment of reduced reproductive function, delayed puberty, supranormal function of the reproductive organs, precoclous puberty, endometriosis, polycystic ovary syndrome, benign prostatic hyperplasis, impaired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              reproductive function or amenorrheae. This sequence represents the human PPY neuropeptide which is used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PYY; peptide YY; human; electrolyte secretion; fluid secretion; nutrient uptake; lipolysis; vasoconstriction; gastrointestinal disorder; diarrhoea; Crohn's disease; irritable bowel syndrome; ileostomy;
                                                                           neuropeptide Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Compositions containing a neuropeptide Y Y4 receptor ligand selective for the hyporthalamic-plunitary-gonadal axis, for trearment of reproductive disorders e.g. delayed or precocious puberty, endometriosis and benign prostatic hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                   Neuropeptide; human; treatment; reproductive disorder; neurope
endocrine; gynecological; cytostatic; puberty; endometriosis;
polycystic ovary syndrome; prostatic hyperplasia; amenorrheae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 194; DB 21; 100.0%; Pred. No. 2.7e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Akinsanya K, Hayward A, Broqua P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 2; 12pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ą
                      Human neuropeptide PPY fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY87550 standard; peptide; 36
                                                                                                                                                                                                                                                                                                                                               98GB-0025969
                                                                                                                                                                                                                                                                                                                                                                                                    98GB-0025969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human peptide YY (PYY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-331548/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FERR ) FERRING BV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified-site
                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                    26-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                               26-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-JUL-2000
                                                                                                                                                                                                                                        GB2344050-A.
```

Seguence Query Match AAY87550;

RESULT 7

요

ò

ö

Gaps

.;

Indels

US6046167-A

cachexia.

Length 36;

```
in the central nervous system (CNS). The method comprises administration of a peptide tyrosine tyrosine (PYT) receptor agonist or a pancreatic polypeptide (PP) receptor agonist. The method is useful for the treatment of Alzheimer's disease and for reducing aluminium levels in the central nervous system, especially the brain, of a subject. The treatments are effective and do not impart excessive toxicological effects. The present sequence represents human PYY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Increased biological potency, prolonged activity, increased half-life, glucose intolerance, insulin resistance; type II diabetes; bone disease; cancer; inflammatory disorder; obesity; developmental disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hyperproliferative skin disease; hormone-dependent disease; homeostasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   intestinal disease; interleukin-8 production; smooth muscle contraction; feeding; blood pressure; pancreatic secretion; mutant; mutein; human;
                                                                                                                                                                                                                                                             Reducing aluminium levels in the central nervous system, for the treatment of Alzheimer's disease comprises administration of a peptide tyrosine receptor agonist or a pancreatic polypeptide receptor agonist
                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method of reducing aluminium levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 194; DB 22; 100.0%; Pred. No. 2.7e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 7; 52pp; English.
                                                                                                                                         (UYNC-) UNIV NORTH CAROLINA STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAU85987 standard; peptide; 36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ó
                                                                                                                                                                                 Taylor IL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'note= "H-Tyr"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-AUG-2001; 2001WO-CA01119
                                                           07-FEB-2001; 2001WO-US03952
                                                                                                 08-FEB-2000; 2000US-0499980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modified human peptide YY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                 Berg BM,
                                                                                                                                                                                                                       WPI; 2001-550001/61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200210195-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-FEB-2002.
                  16-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             peptide YY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                 Croom WJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAU85987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
AAU85987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active amino acid region (III) and a reactive group (II) (e.g. succinimidyl and maleimido groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptide composed of 3-50 amino acids. (I) are useful for modifying therapeutic peptides e.g. hormones, growth cators and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half intracellular uptake and interference with physiological processes. Amb90822 to Amb90823 to Amb908241 represent invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                        Modifying and attaching therapeutic peptides to albumin prevents peptidase degradation, useful for increasing length of in vivo activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; brain aluminium concentration; central nervous system;
CNS; peptide tyrosine-tyrosine receptor; PYY receptor; PP receptor;
pancreatic polypeptide receptor; Alzheimer's disease; nootropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 36;
                                                                                                                                                                                                                                                                                                                          Thibaudeau K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 194; DB 22;
Pred. No. 2.7e-20;
                                                                                                                                                                                                                                                                                                                          Holmes DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Preq. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 327-328; 733pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human peptide tyrosine-tyrosine (PYY).
                                                                                                                                                                                                                                                                                                                          Milner PG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU06188 standard; peptide; 36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.08;
                                                                                                                                                                                                99US-0134406.
99US-0153406.
99US-0159783.
                                                                                                                                                            2000WO-US13576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.
Best Local Similarity 100.
Matches 36; Conservative
                                                                                                                                                                                                                                                                                  (CONJ-) CONJUCHEM INC
                                                                                                                                                                                                                                                                                                                          Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-112059/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protective
                                                                           WO200069900-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200158409-A2
                     sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                          17-MAY-2000;
                                                                                                                                                                                                                     10-SEP-1999;
15-OCT-1999;
                                                                                                                                                                                                    17-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2001
                                                                                                                    23-NOV-2000
                                                                                                                                                                                                                                                                                                                          Bridon DP,
                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAU06188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  neuro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAU06188
```

g

ò

.; 0

Gaps

;

ö DB 22;

Length 36; Indels 9

```
The present sequence represents a human peptide yY (PYY). PYY triggers gain of function in glucose non-responsive foetal and adult islets which leads to glucose responsivity. The specification describes a method for promoting the growth of pancreatic cells and reducing degeneration of pancreatic tissue. The method comprises contacting pancreatic cells or tissue with a composition including PYY or an agonist of PYY. The method is used for treating a disease, especially in a human, associated with altered glucose metabolism, especially insulin resistance, glucose intolerance or glucose non-responsiveness, hyperglycemia, obbesity, hyperlipidemia, hyperfiltration or type II diabetes mellitus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acids encoding 4277 human colon cancer-associated polypeptides, useful for preventing, diagnosing and/or treating colorectal cancers -
                                                                                                                                                                     Promoting the growth of pancreatic cells and reducing degeneration of panocreatic Lissue for treating a disease associated with altered glucose metabolism comprises contacting with a composition including an agonist of) peptide \Upsilon Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; colon cancer; colon cancer antigen; diagnosis; detection; colorectal carcinoma; chromosome 17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human colon cancer antigen protein SEQ ID NO:6128.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 194; DB 21;
100.0%; Pred. No. 8.9e-20;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rosen CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 11; Page 7579-7580; 9803pp; English.
                                                                                                                                                                                                                                                                                Disclosure; Page 82-83; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAG75364 standard; Protein; 176 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Birse CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0157137.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-SEP-2000; 2000WO-US26524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ruben SM, Barash SC,
                      (ONTO-) ONTOGENY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001-235357/24.
                                                                                                        WPI; 2000-565257/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97 AA;
                                                                                                                                 N-PSDB; AAA59713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAH34769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200122920-A2.
                                                                Lu H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAG75364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence
                                                              Pang K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAG75364
    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to modified biological peptides with increased biological potency, prolonged activity and/or increased half life. The peptides of the invention are useful in the treatment of glucose intolerance which may be associated with insulin resistance pathologies, and in the treatment of type II diabetes. They are also useful for treating bone diseases, cancer, diseases related to inflammatory responses, obesity, autism, pervasive developmental clasmory responses, obesity, autism, pervasive developmental responsation in patients with intestinal diseases, inhibition of required in interleukin-8 production, stimulation of acid release, homeostasis, regulation of exocrine and endocrine secretions, smooth muscle contraction, feeding, blood pressure, body temperature and cell growth, regulation of feod intake and energy balance, and stimulation of modified biological peptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide yY; PYY; pancreatic cell growth; pancreatic tissue degeneration; glucose metabolism; insulin resistance; glucose intolerance; glucose non-responsiveness; hyperglycemia; obesity; hyperlipidemia; hyperfiltration; type II diabetes mellitus.
                                                                                                                                                                     Novel modified biological peptide with increased biological potency, prolonged activity, increased half-life, for treating glucose intolerance associated or not with insulin resistance pathologies, type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 194; DB 23;
Pred. No. 2.7e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amino acid sequence of a human peptide yY (PYY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "signal peptide"
29..97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB08020 standard; Protein; 97 AA.
                                                                                                                                                                                                                                                                              Claim 5; Page 62; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
100.0%;
                                          (THER-) THERATECHNOLOGIES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-FEB-2000; 2000WO-US03391
02-AUG-2000; 2000US-222619P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0119577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note=
                                                                                                                               WPI; 2002-206179/26
                                                                                    Habi A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200047219-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-NOV-2000
                                                                                                                                                                                                                                        diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-AUG-2000
                                                                                    Gravel D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB08020;
```

RESULT 11

g

ò

Peptide

. 0

Gaps

; ;

```
0;
         cancer-associated nucleic acid molecules (N) and proteins (P), where the proteins are collectively known as colon cancer antigens. The colon cancer antigens have cytostatic activity and can be used in gene therapy and vaccine production. N and P may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate P associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of P by expressing in a patient's genome that affect the activity of P by expressing inactive proteins or to supplement the patients own production of P. Additionally, N may be used to produce the colon cancer-associated Ps, by inserting the nucleic acids into a host cell and culturing the cell coxpressing the proteins. N and P can be used in the prevention, diagnosis and treatment of colorectal carcinomas and cancers. Ashiving to Ashiving and Ashiving represent sequences used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           comprising a therapeutically active amino acid region (III) and a reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modifying and attaching therapeutic peptides to albumin prevents peptidase degradation, useful for increasing length of in vivo activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protection, endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                              missing at time of publication, meaning no sequences are present for SEQ ID NO:1027 to 1052, 7921 and 7922.
AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a modified therapeutic peptide (I)
                                                                                                                                                                                                                                                                         present invention. N.B. Pages 666 to 682 and page 7053 of the sequence listing were
                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                       Length 176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Thibaudeau K;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Parathyroid hormone (PTH) related peptide SEQ ID NO:283.
                                                                                                                                                                                                                                                                                                                                                                                                       Score 194; DB 22;
Pred. No. 1.8e-19;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Holmes DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 285; 733pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Milner PG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ā
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB91109 standard; Peptide; 36
                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0134406.
99US-0153406.
99US-0159783.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-MAY-2000; 2000WO-US13576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-JUN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity 100.9
Watches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CONJ-) CONJUCHEM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bridon DP, Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-112059/12.
                                                                                                                                                                                                                                                                                                                                                                    176 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200069900-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-SEP-1999;
15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB91109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active amino acid region (II) and a reactive group (II) (e.g. succinimidyl and maleimido groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptide composed of 3-50 amino acids. (I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity
a less therapeutically active amino acid region (IV), which covalently bonds with amino/Mydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptide composed of 3-50 amino acids.

(I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Bndogenous therapeutic peptides are not suitable as drug candidates as they require frequent peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half intracellular uptake and interference with physiological processes. AAB90829 to AAB92441 represent peptides which can be used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modifying and attaching therapeutic peptides to albumin prevents peptidase degradation, useful for increasing length of in vivo activity
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thibaudeau K;
                                                                                                                                                                                                                                                                                                                               Length 36;
                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                           Score 188; DB 22;
Pred. No. 1.9e-19;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Holmes DL,
                                                                                                                                                                                                                                                                                                                                                                                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                               1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRPRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 329; 733pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Milner PG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB91226 standard; Peptide; 36
                                                                                                                                                                                                                                                                                                                               96.9%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0134406.
99US-0153406.
99US-0159783.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAY-2000; 2000WO-US13576.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-JUN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                   35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide YY SEQ ID NO:400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bridon DP, Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CONJ-) CONJUCHEM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-112059/12.
                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                           36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200069900-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .0-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB91226;
                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
AAB91226
                                                                                                                                                                                                                                                                                                                                                     Best
                                                                                                                                                                                                                                                                                                                                                                                                                                             pp
     5555555555555555888
                                                                                                                                                                                                                                                                                                                                                                                                           δλ
```

8

ö

```
;
0
      Endogenous therapeutic
in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half life) and specificity as bonding to large molecules decreases intracellular uptake and interference with physiological processes. AAB90829 to AAB92441 represent peptides which can be used in the exemplification of the present invention.
                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide YY; PYY; gastro-enterological disorders; intestinal water; electrolyte secretion; cell proliferation; nutrient transport; lipolysis; blood flow regulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR62049 describes the amino acid sequence of porcine peptide YY (PYY), which was isolated from the endocrine cells of the porcine gastrointestinal tract and pancreas. Using this sequence as a base the PYY analogues described in AAR62051-R62082 were produced. The new peptides were found to have a variety of properties, that made them useful as therapeutic agents in the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gastro-enterological disorders. As part of a therapeutic composition they could be used for decreasing excess intestinal water and electrolyte secretion, for regulating cell proliferation and augmenting nutrient transport, and for regulating lipplysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New peptide derivs. - useful as therapeutic agents, for treating gastro-enterological disorders
                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                      Score 185; DB 22; Length 36; Pred. No. 5e-19;
                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                      1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLLTRPRY 36
                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 3; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                      AAR62049 standard; peptide; 36 AA
                                                                                                                                                                                                      95.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93US-0109326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94WO-US03380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93US-0038534
                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-JUN-1995 (first entry)
                                                                                                                                                                                                                  Best Local Similarity 94.4
Matches 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Porcine peptide YY (PYY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYCI-) UNIV CINCINNATI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1994-332815/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Balasubramaniam A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36 AA;
                                                                                                                                                                     36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-AUG-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9422467-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sus scrofa.
                                                                                                                                                                                                                                                                                                                                                                                                                       AAR62049;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                         Sequence
                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                       RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and
                                                                                                                                                                                                                                                                                                                                                                   AAR62049
   88888888888888
                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                     g
```

Score 184; DB 15; Length 36; Pred. No. 7e-19;

94.8%; 94.4%;

Query Match Best Local Similarity

```
Gaps
 ..
0
 Indels
 ;
                1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
 Mismatches
                         ij
 Conservative
34;
Matches
                 δλ
                              qq
```

completed: February 27, 2003, 14:36:15 Search completed: 1 Job time : 36 secs

Perfect score:

Sequence:

OM protein

Run on

Scoring table:

Total number

Searched:

6, Appli 3, Appli 7, Appli 10, Appli 23, Appl 11, Appli 6, Appli 6, Appli 5, Appli 5, Appli

```
Sequence 7, Al Sequence 7, Al Sequence 7, Al Sequence 10, Al Sequence 13, Al Sequence 11, Al Sequence 6, Al Sequence 3, Al Sequence 3, Al Sequence 5, Al Seq
                                                                                                                                                                                                                                                                                                                                            Sequence 10,
Sequence 11,
    Sequence Sequence Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PANCREATIC TUMORS WITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-338-395-2
Sequence 2, Application US/08338395
Sequence 3, Application US/08338395
Sequence 4, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; DB 1;
8.7e-22;
hes 0;
                   US-08-994-946A-6
US-09-229-900-1
US-09-229-900-1
US-09-181-941-3
US-09-229-900-7
US-09-125-138-10
US-07-76-272-23
US-07-76-272-23
US-07-76-272-18
US-07-181-941-6
US-08-264-030-3
US-08-264-030-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 2029 Century Park East 38th Floor CITY: Los Angeles STREET CA Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 194; E
100.0%; Pred. No. 8.7
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ve
CURENT APPLICATION DATA:
APPLICATION NUMBER: US/08/338,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-788-5046
TELEFAX: 310-277-1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Oldenkamp, David J
REGISTRATION NUMBER: 29421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: HUMAN PEPTIDE YY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
  peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 36; Conserv
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: lin
MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-338-395-2
  144
144
144
144
141
129
129
129
105
103
101
101
101
95
95
86
85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2, Appli
                                                                                                                                                     February 27, 2003, 14:35:44 ; Search time 14 Seconds
(without alignments)
75.659 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                      5.1.3
Compugen Ltd
                                                                                                                                                                                                                                                                                     194
1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-047-986B-2
US-09-229-900-2
US-07-882-933-3
US-07-882-93-3
US-08-338-395-1
US-08-047-986B-1
US-09-047-986B-1
US-09-181-941-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1-07-776-272-30
1-09-181-941-2
1-07-882-923-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-338-395-3
US-08-329-151-24
US-08-907-403A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US95-14303-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-907-403A-2
US-09-181-941-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCT-US95-14303-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US95-14303-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-329-151-9
US-09-181-941-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-264-030-1
US-08-338-395-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -07-882-923-2
                                                                                                                                                                                                                                                                                                                                                                                                                                   262574 segs, 29422922 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                      GenCore version
Copyright (c) 1993 - 2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                  - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Issued_Patents_AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                            US-09-634-363-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match Length
```

ö

Gaps

ö

Result

Š.

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 45202-4182
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/054,393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 194; DB 3;
100.0%; Pred. No. 8.7e-22;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Balasubramanian, Ambikaipakan
TITLE OF INVENTION: PEPTIDE YY ANALOGS
CORRESPONDENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Frost & Jacobs, L.L.P.
ADDRESSEE: Trost & Jacobs, L.L.P.
STREET: 2500 PNC Center, 201 East Fifth St.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
PAPLICATION NUMBER: US/09/047,986B
FILING DATE: 25 March 1998
CLASSIFICATION: 514
ATTONNEY AGENT INFORMATION:
NAME: Kristyne A. Bullock
REGISTRATION NUMBER: 42,371
REFERENCE/DOCKET NUMBER: 9183030/508
TELECOMMULCATION INFORMATION:
TELECOMMULCATION INFORMATION:
TELECOMMULCATION INFORMATION:
TELERAX: (513) 651-6731
TELERAX: (510) 651-6731
                                                                                                                                                                                                                                                                                   BMR350/48000
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/09047986B Patent No. 6046167
GENERAL INFORMATION:
                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Sanzo, Michael A.
REGISTATION UNDRER: 36,912
REFERENCE/DOCKET 100HBER: BRR35:
TELECOMMUNICATION INFORMATION:
TELEFHONE: (202)639-6585
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SS: not relevant not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.(
Best Local Similarity 100.)
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-047-986B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-054-393-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/09054393
Patent No. 6017879
GENERAL INFORMATION:
APPLICANT: Mutter, Manfred
APPLICANT: Grouzmann, Eric
TITLE OF INVENTION: Template Associated NPY Y2-Receptor
TITLE OF INVENTION: Agonists
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESSE: ADDRESSEE: Vanson & Elkins LLP
STREET: 1455 Pennsylvania Avenue, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                   GENERAL INFORMATION:
APPLICANT: Balasubramaniam, A. APPLICANT:
TITLE OF INVENTION: ANALOGS OF PEPTIDE YY AND USES TITLE OF INVENTION: THEREOF NUMBER OF SEQUENCES: 30 CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 194; DB 1;
100.0%; Pred. No. 8.7e-22;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/038,534
FILING DATE: 3/29/93
APPLICATION NUMBER: 08/109,326
FILING DATE: 08/19/93
ATTORNEZ/AGENT INFORMATION:
NAME: Paul T. Clark
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00537/105001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PS/2 Model 502 or 55X
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/329,151
                                                                                                                                                                                                                                                                                                 STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMDUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                   Sequence 2, Application US/08329151
Patent No. 5604203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (617) 542-5070
(617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity 100.0
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: N/A
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                              Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX:
                       US-08-329-151-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-329-151-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-054-393-2
    RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

ö

Gaps

```
Length 36;
      WITH PEPTIDE YY AND ANALOGS THEREOF
                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/14303
FILING DATE: 03 November 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/882,923
FILING DATE: 19920512
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/503,198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 194; DB 5;
100.0%; Pred. No. 8.7e-22;
tive 0; Mismatches 0;
                                                               ROSE
38th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Fitch, Even, Tabin & Flannery STREET: 4250 Executive Square, Suite 510 CITY: La Jolla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Boublik, Jaroslav H.
APPLICANT: Rivier, Jean E.F.
APPLICANT: Brown, Maryin R.
APPLICANT: Scott, Neal A.
TITLE OF INVENTION: NPY PEPTIDE ANALOGS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                               LANDE &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                         ADDRESSEE: POMS, SMITH, LANDE & STREET: 2029 Century Park East
                                                                                                                                                                                                                                                                                                             FILING DATE: 03 NOVEMBER 1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: 0.1046nkamp, David J
REGISTRATION NUMBER: 29421
REFERENCE/DOCKET NUMBER: 1070
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-788-5046
INFORMATION FOR SEQ. 1D NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 3, Application US/07882923
; Patent No. 5328899
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMAN PEPTIDE YY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.0
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 36 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PEPTI
                                             CORRESPONDENCE ADDRESS
                                                                     STREET: 202> CITY: Los Angeles
                      NUMBER OF SEQUENCES:
                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                           ZIP: 90067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCT-US95-14303-2
                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
US-07-882-923-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ρp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 36;
                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09229900
Patent No. 6288029
GENERAL INFORMATION:
APPLICANT: Mutter, Manfred
APPLICANT: Lacroix, Jean S.
APPLICANT: Carciox, Jean S.
APPLICANT: TOUZMAND, ETIC
TITLE OF INVENTION: Template Associated NPY Y2-Receptor TITLE OF INVENTION: Agonists
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Vinson & Elkins LLP
                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TREATMENT OF PANCREATIC TUMORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/229,900 FILING DATE:
                                                                             Score 194; DB 3;
Pred. No. 8.7e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 194; DB 4;
Pred. No. 8.7e-22;
                                                                                                                                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                              1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                           100.0%; Score 194; D
100.0%; Pred. No. 8.7
Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1455 Pennsylvania Avenue, N.W. CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
ATTORNEY, AGENT INFORMATION:
NAME: Sanzo, Michael A.
REGISTRATION NUMBER: 36,912
REFRERACE/POCKET NUMBER: BMR350/48000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)639-6585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, Application PC/TUS9514303 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Some 100.0%; Putive 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: McFadden, David W
TITLE OF INVENTION: TREATMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SS: not relevant not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (202)639-6604
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Floppy disk
                                                                                                Best_Local Similarity 100.
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-047-986B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 20004-1008
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RY: U.S.
20004-1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Washi
STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ANTI-SENSE:
US-09-229-900-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCT-US95-14303-2
                                                                                                                                                                                                                                                                            US-09-229-900-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
                                                                                                                                                                                                                                                        RESULT 5
                                                                                                                                                           ò
                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ö

Gaps

.; 0

Indels

30-MAR-1990

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                            Sequence 1, Application US/08329151
Patent No. 5604203
GENERAL INFORMATION:
APPLICANT: Balasubramaniam, A.
TITLE OF INVENTION: THEREOF
VUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS: ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1. Application US/09047986B
Patent No. 6046167
GENERAL INFORMATION:
APPLICANT: Balasubramanian, Ambikaipakan
TITLE OF INVENTION: PEPTIDE YY ANALOGS
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Frost & Jacobs, L.L.P.
STREET: 2500 PNC Center, 201 East Fifth St.
CITY: Cincinnati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 184; DB 1;
Pred. No. 2.6e-20;
1; Mismatches 1
                                1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YPAKPEAPGEDASPEELSRYYASLRHYLNLYTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PS/2 Model 502 or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/329,151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              00537/105001
                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/038,534
FLING DATE: 3/29/93
APPLICATION NUMBER: 08/109,326
FILING DATE: 08/19/93
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Paul T. Clark
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (617) 542-5070 (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (617) 542-89
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                   STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY: linear
US-08-329-151-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 34; Conserv
                                                                                                                                                                                                                                                                                                        ADDAL.
STREET: 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-047-986B-1
                                                                                                         RESULT 9
US-08-329-151-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
          ŏ
                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                 Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94.8%; Score 184; DB 1; Length 36; 94.4%; Pred. No. 2.6e-20; Live 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: McFadden, David W
TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS WITH
TITLE OF INVENTION: PEPTIDE YY AND ANALOGS THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMpatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE:
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                               Score 184; DB 1; L
Pred. No. 2.6e-20;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E: POMS, SMITH, LANDE & ROSE
2029 Century Park East 38th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                               US 07/219,596
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/219.
FILING DATE: 15-7UL-1988
ATTORNEY/AGENT INFORMATION:
NAME: Schumann, James J.
REGISTRATION NUMBER: 20,856
REFERENCE/POCKET NUMBER: 5286/TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-552-0955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/08338395
Patent No. 5574010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Oldenkamp, David J
REGISTRATION NUMBER: 29421
REFERENCE/DOCKET NUMBER: 1070
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-788-5046
TELEFAX: 310-277-1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               porcine peptide YY
                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                               Query Match 94.8%;
Best Local Similarity 94.4%;
Matches 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: AMINO ACID
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-07-882-923-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: POMS, SMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 2029 CC...
CITY: LOS Angeles
STATE: CA
COUNTRY: USA
7 TP: 90067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-338-395-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-338-395-1
```

g ò

ö

Gaps

```
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                      TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     porcine peptide YY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                      94.88;
94.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 310-277-1297
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 36 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                        34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 94.4'
Matches 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Los Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM:
                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 0 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCT-US95-14303-1
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nicolas, Pierre
TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 10036-28IN:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows
APPLICATION DATA:
APPLICATION UNBER: US/09/181,941
FILING DATE: 28-Oct-1998
CLASSIFICATION: <UNROWN>
                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94.8%; Score 184; DB 3; L
94.4%; Pred. No. 2.6e-20;
Live 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 3909-0021-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/574,701
FILING DATE: 19-DEC-1995
APPLICATION NUMBER: FR 95 07831
                                                                                COMPUTER: IBM COMPATIBLE
COMPUTER: WAS -DOS
SOFTWARE: WORD 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/047,986B
FILING DATE: 25 March 1998
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 42,371
REFERENCE/DOCKET NUMBER: 9183030/508
TELECOMMUNICATION: NEWBARTION:
                                                                                                                                                                                                                                                                                    9183030/508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/09181941
Patent No. 6440690
GENERAL INFORMATION:
APPLICANT: Mor, Amram
Vouldoukis, loannis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 29-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                  TELEPHONE: (513) 651-6731
TELEFAX: (513) 651-6981
TELEX: 21-4396 FeJ Cin
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 94.4
Matches 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: NY COUNTRY: U
            COUNTRY: USA
ZIP: 45202-4182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-047-986B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-181-941-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                 Gaps
                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                  Score 184; DB 4; Length 36;
Pred. No. 2.6e-20;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
                                                                                                                                                                                                                                                                                                  RESULT 12
PCT-US95-14303-1
Sequence 1, Application PC/TUS9514303
GENERAL INFORMATION:
APPLICANT: McFadden, David W
TITLE OF INVENTION: TREATMENT OF PANCREATIC TUMORS
TITLE OF INVENTION: WITH PEPTIDE YY AND ANALOGS THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94.8%; Score 184; DB 5;
94.4%; Pred. No. 2.6e-20;
tive 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: POMS, SMITH, LANDE & ROSE
STREET: 2029 Century Park East 38th Floor
                                                                                                                                                                                                   1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                          1 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY: linear
; MOLECULE TYPE: No. 6440690e
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-181-941-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Oldenkamp, David J
REGISTRATION NUMBER: 29421
REFERENCE/DOCKET NUMBER: 107012F
TELEPHONE: 310-788-5046
TELEPHONE: 310-777-1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/US95/14303
FILING DATE: 03 November 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PC-DOS/MS-DOS
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 30, Application US/07776272

Patent No. 5612454

GENERAL INFORMATION:
APPLICANT: Reminuma, Toshihiko
APPLICANT: Tajina, Masahiro
ITILE OF INVENTION:
Process for Purification of Polypeptide
NUMBER OF SEQUENCE: 31

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83.5%; Score 162; DB 4; Length 36; 77.8%; Pred. No. 4.3e-17; Live 5; Mismatches 3; Indels
                                                                                                                                                COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows Version 2.0b
                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PILING DATE: 19 DEC-1995
APPLICATION NUMBER: US 08/574,701
FILING DATE: 29-DEC-1995
ATOREY/AGENT INFORMATION:
NAME: COTUZZI, LAUTA A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 3909-0021-999
TELECHONE: 650-493-4335
TELECHAN: 650-493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/776,272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mueller & Player
P.O. Box 18218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/181,941
FILING DATE: 28-Oct-1998
CLASSIFICATION: <u >Unknown></u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: No. 6440690e SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Wegner, Cantor, Mueller STREET: 1233 20th St. N.W. P.O. Bo CITY: Washington STATE: District of Columbia CUNTRY: United States of America 21P: 20036-8218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                            MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 650-493-555
TELEX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
                                                                                                      COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 77.8
Matches 28; Conservative
                                                            COUNTRY: USA
ZIP: 10036-2811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19911129
                    CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
US-07-776-272-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-181-941-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nicolas, Pierre
TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 90.2%; Score 175; DB 1; Length 36; Best Local Similarity 91.7%; Pred. No. 5.4e-19; Matches 33; Conservative 1; Mismatches 2; Indels
                                                                                                                          PEPTIDE YY AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTEN READMALE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TURNEL, ACLIA T. Clark
NAME: Paul T. Clark
REGISTRATION NUMBER: 30,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/329,151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/038,534
FLING DATE: 3/29/93
APPLICATION NUMBER: 08/109,326
FILING DATE: 08/19/93
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Mor, Amram
Vouldoukis, Ioannis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/09181941 Patent No. 6440690 GENERAL INFORMATION:
                                     Sequence 9, Application US/08329151
Patent No. 5604203
                                                                           GENERAL INFORMATION:
APPLICANT: Balasubramaniam, A.
TITLE OF INVENTION: ANALOGS OF
TITLE OF INVENTION: THEREOF
                                                                                                                                                                  NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
CADRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 00
IELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (617) 542-5070 (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (617) 542-890.
TELEX: 200154
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid STRANDEDNESS: N/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear FEATURE:
                                                                                                                                                                                                                                                      Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 14
US-09-181-941-1
               US-08-329-151-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-329-151-9
```

ò q

ö

Search completed: February 27, 2003, 14:38:41 Job time: 15 secs

THIS PAGE BLANK (USPTO)

```
οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2, Appli
Sequence 4, Appli
Sequence 3, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 5, Appli
Sequence 6, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1040, Ap
Sequence 6, Appli
Sequence 27, Appl
Sequence 2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Appli
Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1199, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, Appli
                                                                                                                            February 27, 2003, 14:36:19 ; Search time 12 Seconds
(without alignments)
113.165 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Sequence 1, Sequence 2, Sequence 2, Sequence 6, Sequence 16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /cgn2_6/ptodata/1/pubpaa/USOB_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
5.1.3
Compugen Ltd.
                                                                                                                                                                                                                                                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 US-10-016-969-2

2 US-10-038-045-4

2 US-10-016-969-3

2 US-10-038-045-2

2 US-10-038-045-2

2 US-10-038-045-5

2 US-10-002-048A-2

US-10-002-048A-2

US-10-016-969-4

2 US-10-016-969-5

2 US-10-016-969-1

2 US-10-016-969-1

2 US-10-016-969-1

0 US-09-955-528-16

US-09-955-528-16

US-09-955-528-16

US-09-955-528-16

US-09-959-958-5

US-09-959-958-5

US-09-958-5
                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                           174566 seqs, 37721826 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
GenCore version
Copyright (c) 1993 - 2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Published_Applications_AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                     OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                    US-09-634-363-2
194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1000.0
94.8
883.5
883.5
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
775.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š.
```

```
Sequence 46, Appl
Sequence 46, Appl
Sequence 101, Appl
Sequence 11, Appl
Sequence 65, Appl
Sequence 65, Appl
Sequence 67, Appl
Sequence 67, Appl
Sequence 57, Appli
Sequence 67, Appli
Sequence 67, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 67, Appli
                                                                                                                                            Sequence 14, Appl
Sequence 20, Appl
Sequence 39, Appl
Sequence 74, Appl
  Sequence
              Sequence
         Sequence
) US-09-205-658-58

) US-09-844-333A-58

) US-09-764-898-206

) US-09-205-658-46

0 US-09-844-353A-46

0 US-09-844-353A-101

0 US-09-844-353A-101

0 US-09-840-243B-12

US-09-840-243B-12

US-09-840-243B-12

US-09-832-129-65

US-09-832-129-65

US-09-832-129-65

US-09-832-129-67

US-09-877-111-11

0 US-09-877-550-1630

US-09-877-550-1630

US-09-788-711A-2

0 US-09-788-711A-2

0 US-09-788-711A-2

0 US-09-788-711A-2

0 US-09-788-711A-2

0 US-09-840-243B-13
                                                                                                                                     US-09-813-148-4
US-09-810-796-14
                                                                                                                                                  US-10-128-870-20
US-10-108-605-39
US-09-801-368-74
```

ALIGNMENTS

```
Sequence 1. Application US/10016969
Patent No. US20020141985A1
GENERAL INFORMATION:
APPLICANT: Amylin Pharmaceuticals, Inc.
APPLICANT: Pittner, Richard
APPLICANT: Paterniti, James
TITLE OF INVENTION: Peptide YY and Peptide YY Agonists for the Treatment of Metabo
TITLE OF INVENTION: Disorders
FILE REFERENCE: 24001-010
CURRENT APPLICATION NUMBER: US/10/016,969
CURRENT FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: US 60/256,216
WINDER OF THE CONTROL O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Application US/10038045
Patent No. US20020150964A1
GENERAL INFORMATION:
APPLICANT: Mor, Amram
APPLICANT: Mor, Amram
Nicolas, Pierre
TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 194; DB 12;
100.0%; Pred. No. 2.4e-19;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.0
SEQ ID NO
LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
Best Local Similarity 100.
Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
US-10-016-969-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
US-10-038-045-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-016-969-2
```

ö

ö

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                         Vouldoukis, Ioannis
Nicolas, Pierre
TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                      Length 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 36;
                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FEASLEG for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/038,045
FILING DATE: 02-3an-2002
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
                                                                      Score 180; DB 12;
Pred. No. 1.6e-17;
                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 162; DB 12;
Pred. No. 4.2e-15;
5; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 3909-0021-999 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/09/181,941
FILING DATE: 28-Oct-1998
APPLICATION NUMBER: US 08/574,701
FILING DATE: 19-DEC-1995
APPLICATION NUMBER: FR 95 07831
FILING DATE: 29-UN-1995
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, LAURA A
REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36
                                                                                                                Mismatches
                                                                                                                                                               3 IKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                    1 IKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: No. US20020150964Ale
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                            RESULT 4
US-10-038-045-1
; Sequence 1, Application US/10038045
; Patent No. US20020150964A1
; GENERAL INFORMATION:
APPLICANT: Mor, Amram
Vouldoukis, Ioannis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                                 Query Match 92.8%; Sco
Best Local Similarity 100.0%; P.
Matches 34; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 36 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       83.5%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 10036-2811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: New York
    ; ORGANISM: Homo sapiens
US-10-016-969-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-038-045-1
                                                                                                                                                                                                    QD
                                                                                                                                                               οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/10016969
Patent No. US20020141985Al
GRNERAL INFORMATION:
APPLICANT: AMPLIA Pharmaceuticals, Inc.
APPLICANT: Pittner, Richard
APPLICANT: Pittner, Richard
APPLICANT: Poung, Andrew
APPLICANT: Poung, Andrew
APPLICANT: Poung, Andrew
TITLE OF INVENTION: Deptide YY and Peptide YY Agonists for the Treatment of Metabolic
TITLE OF INVENTION: Disorders
FILE REFERENCE: 24001-010
CURRENT FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: US/00/256,216
PRIOR APPLICATION NUMBER: US/00/256,216
PRIOR APPLICATION NUMBER: US/00/212-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: DISKette
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows Version 2.0b
CURREW APPLICATION DATA:
APPLICATION NUMBER: US/10/038,045
FILING DATE: 02.Jan-2002
CLASSIFICATION OATA:
APPLICATION NUMBER: US/09/181,941
FILING DATE: 28-Oct-1998
APPLICATION NUMBER: US 08/574,701
FILING DATE: 19-DEC-1995
ATTORNEY/ACRU.TRIORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94.8%; Score 184; DB 12;
94.4%; Pred. No. 5.1e-18;
tive 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: COLUZZI, LAULA A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 3909-0021-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-555
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: No. US20020150964Ale SEQUENCE DESCRIPTION: SEQ ID NO: 4:
                                                                 ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn version 3.0
                     NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 94.4
Matches 34; Conservative
                                                                                                                CITY: New York
                                                                                                                                                            COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn ver
SEQ ID NO 3
LENGTH: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-038-045-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-016-969-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

ö

```
ADDRESSEE: Pennie & Edmonds LLP
                                                                                                                                            MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 75.3%;
Best Local Similarity 69.4%;
Matches 25; Conservative
                                                                                                ZIP: 10036-2811
COMPUTER READABLE FORM:
                                            CITY: New York
                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-10-016-969-4
                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-016-969-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-038-045-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 4
LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nicolas, Pierre
TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
                                                                                                                                                             PEPTIDES FOR THE ACTIVATION OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
FILING DATE: 02-Jan-2002
CLASSIFICATION: UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78.9%; Score 153; DB 12; 75.0%; Pred. No. 6.5e-14; iive 4; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 3909-0021-999
                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/181,941
FILING DATE: 28-Oct-1998
APPLICATION NUMBER: US 08/574,701
FILING DATE: 19-DEC-1995
APPLICATION NUMBER: FR 95 07831
FILING DATE: 29-UN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear

MOLECULE TYPE: NO. US20020150964Ale
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-038-045-2
                                                                                                                                          Nicolas, Pierre
TITLE OF INVENTION: PEPTIDES FOR
                                                                                                                       Vouldoukis, Ioannis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vouldoukis, Ioannis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                   Sequence 2, Application US/10038045
Patent No. US20020150964Al
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 5, Application US/10038045
Patent No. US20020150964Al
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                        ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Mor, Amram
                                                                                                     Amram
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 78.9
Best Local Similarity 75.0
Matches 27; Conservative
                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                     CITY: New York
                                                                                                                                                                                                                                                                                                                           USA
                                                                                                APPLICANT: Mor,
                                                                                                                                                                                                                                                                                                                           COUNTRY:
RESULT 5
US-10-038-045-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-038-045-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

```
APPLICANT: Amylin Pharmaceuticals, Inc.
APPLICANT: Pittner, Richard
APPLICANT: Pittner, Richard
APPLICANT: Poung, Andrew
APPLICANT: Poung, Andrew
APPLICANT: Paterniti, James
TITLE OF INVENTION: Peptide YY and Peptide XY Agonists for the Treatment of Metabo
TITLE OF INVENTION: Disorders
FILE REPERBUCE: 24001-010
CURRENT APPLICATION NUMBER: US/10/016,969
CURRENT FILING DATE: 2001-12-14
PRIOR PILING DATE: 2000-12-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                               COMPUTER: IBM Compatible OPERATING SYSTEM: Windows SOFTWARE: FastSEQ for Windows Version 2.0b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 146; DB 12;
Pred. No. 5.5e-13;
6; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNET/AGENT INFORMATION:
NAME: COLUZZI, LAURA
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 3909-0021-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 YPSKPDNPGEDAPAEDLARYYSALRHYINLITRQRY 36
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/038,045
FILING DATE: 02-Jan-2002
CLASSIFICATION: «Unknown»
                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/181,941
FILING DATE: 28-Oct-1998
APPLICATION UMBER: US 08/574,701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 19-DEC-1995
APPLICATION NUMBER: FR 95 07831
FILING DATE: 29-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: No. US20020150964Ale SEQUENCE DESCRIPTION: SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application US/10016969
Patent No. US20020141985A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 36 amino acids
```

```
RESULT 10
US-10-016-969-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-016-969-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-016-969-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 5
LENGTH: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                рp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                   ŏ
                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
     Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                     Indels
                                                                                                                                                                                Sequence 2, Application US/10002048A
Publication No. US20020182616A1
GREERAL INFORMATION:
APPLICANT: Wahlestedt, Claes
APPLICANT: Daily, Bo.
TITLE OF INTENTION: Single Nucleotide Polymorphisms
FILE REFERENCE: 10806-143
CURRENT APPLICATION NUMBER: US/10/002,048A
CURRENT FILING DATE: 2001-11-02
PRIOR APPLICATION NUMBER: SE 0004035-2
PRIOR FILING DATE: 2000-11-03
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM Compatible OPERATING SYSTEM: Windows SOFTWARE: FastSEQ for Windows Version 2.0b
Score 144; DB 12;
Pred. No. 1e-12;
7; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74.2%; Score 144; DB 9; I 66.7%; Pred. No. 3.2e-12; iive 7; Mismatches 5;
                                                                                    1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/181,941
FILING DATE: 28-Oct-1998
APPLICATION NUMBER: US 08/574,701
FILING DATE: 19-DEC-1995
APPLICATION NUMBER: FR 95 07831
FILING DATE: 29-UUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/038,045
FILING DATE: 02-Jan-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3, Application US/10038045 Patent No. US20020150964Al GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
   74.28;
66.78;
   Query Match
Best Local Similarity 66.7
Matches 24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIP: 10036-2811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 24; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: human
US-10-002-048A-2
                                                                                                                                                     RESULT 8
US-10-002-048A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-038-045-3
                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                     ò
                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

```
APPLICATY: Paterniti, James
TITLE OF INVENTION: Peptide YY and Peptide XY Agonists for the Treatment of Metabo
TITLE OF INVENTION: Disorders
TITLE OF INVENTION: Disorders
FILE REFERENCE: 24001-010
CURRENT APPLICATION NUMBER: US/10/016,969
CURRENT FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: US 60/256,216
PRIOR FILING DATE: 2000-12-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Paterniti, James
TITLE OF INVENTION: Peptide YY and Peptide YY Agonists for the Treatment of Metabo
TITLE OF INVENTION: Disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 34;
                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 132; DB 12;
Pred. No. 3.6e-11;
7; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                       Score 141; DB 12;
Pred. No. 2.5e-12;
NAME: Coruzzi, Laura A
REGISTRATION UNDRER: 30,742
REFERENCE/DOCKET NUMBER: 3909-0021-999
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 KPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 KPDNPGEDAPAEDMARYYSALRHYINLITRQRY 34
                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: No. US20020150964Ale SEQUENCE DESCRIPTION: SEQ ID NO: 3: US-10-038-045-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 24001-010 CURRENT APPLICATION NUMBER: US/10/016,969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5, Application US/10016969
Patent No. US20020141985A1
GENERAL INFORMATION:
APPLICANT: Amylin Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Amylin Pharmaceuticals, Inc.
APPLICANT: Pittner, Richard
APPLICANT: Young, Andrew
                                                                                            TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
TELEX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/10016969 Patent No. US20020141985A1
                                                                                                                                                                                                               LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                        .
ω
                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68.0%;
                                                                                                                                                              INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                         Query Match 72.7%;
Best Local Similarity 63.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pittner, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                        23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Young, Andrew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
nes 22; Conserv
```

```
APPLICANT: LU, Dyung Alna M.
APPLICANT: LU, Dyung Alna M.
APPLICANT: PATTERSON, Chandra
TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
FILE REPERENCE: PF-0701 USA
CURRENT APPLICATION NUMBER: US/09/965,528
CURRENT FILING DATE: 2001-09-26
PRIOR FILING DATE: 1999-05-19
PRIOR FILING DATE: 1999-07-15
PRIOR FILING DATE: 1999-07-15
PRIOR FILING DATE: 1999-07-15
PRIOR FILING DATE: 1999-07-30
PRIOR FILING DATE: 1999-07-30
PRIOR FILING DATE: 1999-07-30
PRIOR FILING DATE: 1999-10-04
NUMBER: OF SEQ. ID NOS: 55
SOFTWARE: PERL PROGRAM
        SOFTWARE: FastSEQ for Windows Version 2.0b
                                                                                                        PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/181,941
FILING DATE: 28-0ct-1998
APPLICATION NUMBER: US 08/574,701
FILING DATE: 19-DEC-1995
APPLICATION NUMBER: F 95 07831
FILING DATE: 29-JUN-1995
ATONEX/AGENT INFORMATION:
NAME: COLOTZÍ, Laulra A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 30,742
TELECHONE: 650-493-4935
TELECHONE: 650-493-45556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 52.1%; Score 101; DB 12; Best Local Similarity 73.9%; Pred. No. 2.9e-07; Matches 17; Conservative 4; Mismatches 2;
                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/038,045
FILING DATE: 02-Jan-2002
CLASSIFICATION: CURKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: No. US20020150964Ale: SEQUENCE DESCRIPTION: SEQ ID NO: 6: US-10-038-045-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16, Application US/09965528; Publication No. US20020187523A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14 PEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 PEEMNKYLTALRHYINLVTRQRY 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 23 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: INCYTE GENOMICS, INC
                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LAL, Preeti
BURFORD, Neil
BANDMAN, Olga
BAUGHN, Mariah R.
AZIMZAI, Yalda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TANG, Y. Tom
YUE, Henry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-965-528-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 16
LENGTH: 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vouldoukis, Ioannis
Nicolas, Pierre
TITLE OF INVENTION: PEPTIDES FOR THE ACTIVATION
OF THE IMMUNE SYSTEM IN HUMANS AND ANIMALS
                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                        Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52.6%; Score 102; DB 10; Length 95; 45.7%; Pred. No. 1.1e-06;
                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                    Ouery Match
Best Local Similarity 48.6%; Pred. No. 1.1e-07;
Matches 17; Conservative 11; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                2 PIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 PIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATE SOUTHAN, CHRISTOPHER
TITLE OF INVENTION: NOVEL COMPOUNDS
FILE REFERENCE: GP-30015-C1
CURRENT APPLICATION NUMBER: US/09/757,712
CURRENT FILING DATE: 2001-01-10
PRIOR APPLICATION NUMBER: EP 97307187.1
PRIOR FILING DATE: 1997-09-16
PRIOR PLING DATE: 1998-07-07
PRIOR FILING DATE: 1998-07-07
NUMBER OF SEQ ID NOS: 2
SOFTWARE: FastSEQ for Windows Version 3.0
CURRENT FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: US 60/256,216
PRIOR FILING DATE: 2000-12-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible OPERATING SYSTEM: Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09757712 Patent No. US20010016339A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/10038045
Patent No. US20020150964A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Mor, Amram
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
                                                                                                                                                  TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , ORGANISM: HOMO SAPIENS
US-09-757-712-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                      -09-757-712-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-038-045-6
                                                                                                                                                                                            US-10-016-969-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 2
LENGTH: 95
                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
```

ö

Gaps

ö

Length 23; Indels

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (30)
COTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-925-300-1040
                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                        RESULT 15
US-09-925-300-1040
; Sequence 1040, Application US/09925300
; Patent No. US20020151681A1
; GENERAL INFORMATION:
APPLICANT: Craig Rosen,
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PA101
; CURRENT APPLICATION NUMBER: US/09/925,300
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05988
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEC ID NOS: 1890
; SOFTHARE: PatentIn Ver. 2.0
; SEQ ID NO 1040
; LENGTH: 85
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20020187523A1 5037143CD1
US-09-965-528-16
                                                                                  Ouery Match 51.0%; Score 99; DB 9; Length 178; Best Local Similarity 47.1%; Pred. No. 5.8e-06; Matches 16; Conservative 11; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45.9%; Score 89; DB 10; Length 85; 66.7%; Pred. No. 5.2e-05; tive 6; Mismatches 1; Indels
                                                                                                                                                                                            2 PIKPEAPGEDASPEELNRYYASLRHYLNLVTROR 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 ELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    32 DMARYYSALRHYINLITRORY 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 66.7
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

Search completed: February 27, 2003, 14:39:00 Job time : 13 secs

```
5.1.3
Compugen Ltd.
version 5
- 2003 (
GenCore
Copyright (c) 1993
```

OM protein - protein search, using sw model

February 27, 2003, 14:34:48; Search time 45 Seconds (without alignments) 76.908 Million cell updates/sec Run on:

Title: Perfect score: Sequence:

US-09-634-363-2 194 1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283224 seqs, 96134422 residues Searched:

283224 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

pIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
1: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		æ			SUMMARIES	
Result No.	Score	Query Match	Query Match Length	DB	ID	Description
	194	100.0	36	7	A31358	peptide YY - human
7	194	100.0	90	7	534569	YY DI
٣	194	100.0	06	7	S34568	λX
4	194	100.0	97	~	S33795	YY
Ŋ	184		36	Н	YYPG	YY
9	184	94.8	36	7	A60416	- XX
7	184	94.8	98	7	A29364	YY p
œ	168	96.6	97	7	A55914	λX
6	156	80.4	36	~	PCGXA	ic
10	156	80.4	36	7	PCDFY	
11	156	80.4	36	7	A49743	
12	155	79.9	36	7	A26377	
13	152	78.4	36	7	S27054	ਰ
14	147	75.8	37	7	S26954	peptide YY-related
15	147	75.8	97	7	A41979	neuropeptide Y pre
16	146	75.3	36	7	NYPGY	×
17	144	74.2	36	7	A30485	neuropeptide Y - r
18	144	74.2	36	7	B30485	neuropeptide Y - g
19	144	74.2	97	Н	NYHUY	Y pr
20	144	74.2	98	7	A25916	×
21	143	73.7	36	7	S07052	×
22	141	72.7	36	7	A48540	neuropeptide Y - c
23	141	72.7	36	7	A39393	neuropeptide Y - 1
24	141	72.7	97	7	JC1460	neuropeptide Y pre
25	140	72.2	96	7	B41979	×
56	136	70.1	86	7	C41979	×
27	135	9.69	93	7	IS0809	- ri
28	133	9.89	36		YYFIS	peptide YY - short
29	133	9.89	104	7	I50808	neuropeptide Y pre

peptide YG - Ameri	neuropeptide Y - s	pancreatic hormone		pancreatic hormone											
A26781	S16943	PCBO	PCPG	PCDG	C61132	C60071	PCSH	PCCT	РСНО	A28256	A61132	D61132	B60413	A28578	JQ0365
7	~	_	-	٦	7	7	7	, - 1	-	7	~	H	7	7	7
37	36	36	36	93	36	36	59	99	95	126	36	36	36	36	36
68.0	62.9	58.2	57.2	57.2	54.6	54.6	54.6	54.6	54.6	54.6	54.1	54.1	53.6	53.6	53.1
132 68.0															

ALIGNMENTS

```
Patista
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens
C;Accession: A31358; A60676
R;Tatemoto, K.; Nakano, I.; Makk, G.; Angwin, P.; Mann, M.; Schilling, J.; Go, V.L.W.
B;Dechem Biophys. Res. Comnun. 157, 713-717, 1988
A;Title: Isolation and primary structure of human peptide YY.
A;Reference number: A31358; MUID:89076307; PMID:3202875
A;Molecule type: protein
A;Residues: 1-36 <TAT>
A;Eperlein, G.A.; Eysealein, V.E.; Schaeffer, M.; Layer, P.; Grandt, D.; Goebell, H.;
Peptides: 10, 797-803, 1989
A;Title: A new molecular form of PYY: structural characterization of human PYY(3-36)
A;Reference number: A60676; MUID:90068171; PMID:2587421
A;Accession: A60676
A;Molecule type: protein
A;Residues: 1-36 <EBE>
C;Superfamily: pancreatic hormone
C;Keywords: amidated carboxyl end; intestine; neuropeptide
C;Keywords: amidated carboxyl end; (Tyr) #status experimental
```

Gaps ö Length 36; Indels 100.0%; Score 194; DB 2; 100.0%; Pred. No. 4.9e-19; live 0; Mismatches 0; Query Match 100.0 Best Local Similarity 100.0 Matches 36; Conservative

ó

1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36 1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36 ò qq

RESULT 2 S34569

peptide YY precursor (clone L2) - human (fragment)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: O2-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 09-May-1997
C;Accession: S34569
R;Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.
Biochim Biophys. Acta 1173, 345-349, 1993
A;Title: Clohing and structural determination of human peptide YY cDNA and gene.
A;Reference number: S33795; MUID: 93305732; PMID: 8318545
A;Accession: S34569
A;Accession: S4569
A;Accession: preliminary
A;Residues: 1-90 <KOH>
C;Superfamily: pancreatic hormone

Length 90; Score 194; DB 2; Pred. No. 1.4e-18; 100.0%; Best Local Similarity Query Match

ö

Gaps

; 0

S

ö

Gaps

.; 0

Indels

```
C.Species: Rattus norvegicus (Norway rat)
C.Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 16-Jul-1999
C.Accession: A37955; A29364; JT0416
R.Krasinski, S.D.; Wheeler, W.B.; Leiter, A.B.
Mol. Endocrinol: 5, 433-440, 1991
A,Title: Isolation, characterization, and developmental expression of the rat peptide A,Reference number: A37955; MUID:91367188; PMID:1890992
                                                                                                                                                                                                                                                                                                                                                          peptide YY - dog
C:Species: Canis lupus familiaris (dog)
C:Species: Canis lupus familiaris (dog)
C:Date: 11-Feb-1993 #sequence_revision 11-Feb-1993 #text_change 17-Mar-1999
C;Accession: A60416
R:Eysselein, V.E.; Eberlein, G.A.; Grandt, D.; Schaeffer, M.; Zehres, B.; Behn, U.; Speptides 11, 11-116, 1990
A;Title: Structural characterization of canine PYY.
A;Reference number: A60416; MUID:90259843; PMID:2342986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Rosaidues: 1-98 < KRA>
A; Cross-references: GB: S57220; NID: 9235283; PIDN: AAB19752.1; PID: 9235284
A; Cross-references: GB: S57220; NID: 9235283; PIDN: AAB19752.1; PID: 9235284
R; Leiter, A.B.; Toder, A.; Wolfe, H.J.; Taylor, I.L.; Cooperman, S.; Mandel, G.; Goo
J. Biol. Chem. 262, 12984-12988, 1987
A; Title: Peptide YY. Structure of the precursor and expression in exocrine pancreas.
A; Reference number: A29364; MUID: 88007492; PMID: 3654598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: GB:M17523; NID:g204316; PIDN:AAA41222.1; PID:g204317 R;Corder, R.; Gaillard, R.C.; Boehlen, P. Regul. Pept. 21, 253-261, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Title: Isolation and sequence of rat peptide YY and neuropeptide Y. A;Reference number: JT0416; MUID:88321122; PMID:3413293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C.Superfamily: pancreatic hormone C.Keywords: amidated carboxyl end; hormone; intestine F;36/Modified site: amidated carboxyl end (Tyr) #status experimental
F;36/Modified site: amidated carboxyl end (Tyr) #status experimental
                                                      Score 184; DB 1; Length 36; Pred. No. 1e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 184; DB 2; Length 36;
Pred. No. 1e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 184; DB 2; Length 98
Pred. No. 3.2e-17;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                          1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                    1 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Mismatches
                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94.8%;
94.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Superfamily: pancreatic hormone
                                                      94.8%;
ilarity 94.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 94.48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source: colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide YY precursor - rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: protein A; Residues: 1-36 < EYS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A, Residues: 29-64 <COR>
A, Experimental source: c
C, Superfamily: pancreati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                   Best Local Similarity
Matches 34; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-98 <LEI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: A60416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: A37955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: JT0416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: A29364
                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                          δò
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ά
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Proc. Natl. Acad. Sci. U.S.A. 79, 2514-2518, 1982
A;Title: Isolation and characterization of peptide YY (PYY), a candidate gut hormone tha
A;Reference number: A01574; MUID:82222168; PMID:6953409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S33795
S3795
peptide YY (clone S) - human
C; Species: Home sapisns (man)
C; Date: 19; Har-1997 #sequence_revision 19-Mar-1997 #text_change 20-Jun-2000
C; Accession: S33795
R; Kohri, K:; Nata, K:; Yonekura, H:; Nagai, A.; Konno, K.; Okamoto, H.
Biochim, Biophys. Acta 1173, 345-349, 1993
A;Title: Cloning and structural determination of human peptide YY cDNA and gene.
A;Reference number: S33795; MUID:93305732; PMID:8318545
A;Accession: S33795
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-97 <KOH>
A;Residues: 1-97 <KOH>
A;Residues: GB:D13897; NID:9391723; PIDN:BAA02997.1; PID:9391724
C;Superfamily: pancreatic hormone
                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                         C;Species: Homo sapiens (man)
C;Date: 02-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 09-May-1997
C;Accession: 334568
E;Kohri, K.; Nata, K.; Yonekura, H.; Nagai, A.; Konno, K.; Okamoto, H.
Biochim. Biophys. Acta 1173, 345-349, 1993
A;Title: Cloning and structural determination of human peptide YY cDNA and gA;Reference number: S33795; MUID:93305732; PMID:8318545
A;Reference number: S33795; MUID:93305732; PMID:8318545
A;Reference number: S37795; MUID:9306732; PMID:8318545
C;Superiaminary
A;Residues: 1-90 < KOH>
C;Superfamily: pancreatic hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptide YY - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 30-Apr-1982 #sequence_revision 30-Apr-1982 #text_change 23-Aug-1996
C;Accession: A01574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97;
     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 194; DB 2; Best Local Similarity 100.0%; Pred. No. 1.4e-18; Matches 36; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 194; DB 2;
100.0%; Pred. No. 1.5e-18;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                     peptide YY precursor (clone L1) · human (fragment)
                                                   1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 64
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Residues: 1-36 CTAT>
C;Super[amily: pancreatic hormone
C;Reywords: amidated carboxyl end; hormone
  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 100.0
Matches 36; Conservative
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: A01574
36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Accession: A
R; Tatemoto, K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 5
                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                         ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
```

G.; Good

; 0

Gaps

; 0

Length 98;

```
80.48;
75.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 80.48;
1 Similarity 75.08;
27; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: protein
A; Mesidues: 1-36 < KIN>
A; Experimental source: pancreas
C; Superfamily: pancreatic hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 80.4
Best Local Similarity 75.0
Matches 27; Conservative
A; Reference number: A60022
                                            A; Molecule type: protein A; Residues: 1-36 <PAN1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                       A; Accession: A56893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pancreatic peptide Y - alligator gar
N'Alternate names: pancreatic hormone Y
C'Species: Lepisosteus spatula (alligator gar)
C'Species: Lepisosteus spatula (alligator gar)
C'Date: 30-Jun-1991 #sequence_revision 30-Jun-1991 #text_change 06-Dec-1996
C'Accession: 507215
R'Pollock, H.G.; Kimmel, J.R.; Hamilton, J.W.; Rouse, J.B.; Ebner, K.E.; Lance, V.; Rawi
Gen. Comp. Endocrinol. 67, 375-382, 1987
A'Reference number: 507215; MUD:88030594; PMID:3311873
A'Accession: 507215
A'Accession: 507215
A'Residues: 1-36 <POL>
A'Residues: 1-36 <POL>
C'Superfamily: pancreatic hormone
C'Superfamily: pancreatic carboxyl end; hormone; pancreas
C'Keywords: amidated carboxyl end (Tyr) #status experimental
F:36/Modified site: amidated carboxyl end (Tyr) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pancreatic peptide Y - spiny dogfish
N.Alternate names: pancreatic hormone Y
C.Species: Squalus acanthias (spiny dogfish)
C.Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 16-Jun-2000
C.Accession: A60022; A56893
R.Pan, J.2.; Shaw, C.; Halton, D.W.; Thim, L.; Johnston, C.F.; Fairweather, I.; Buchanan Regul. Pept. 35, 252, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A, Title: Isolation and primary structure of peptide Y from the pancreas of the spiny dog
                                                                                                                                                                                                                                                                                   R.Hercog, H.; Hort, Y.; Schneider, R.; Shine, J.
Proc. Natl. Acad. Sci. U.S.A. 92, 594-598, 1995
Proc. Natl. Acad. Sci. U.S.A. 92, 594-598, 1995
Proc. Natl. Acad. Sci. U.S.A. 92, 594-598, 1995
Aritle: Seminalplasmin: recent evolution of another member of the neuropeptide Y gene A; Reference number: A55914; MUID:95132646; PMID:7831336
A; Recession: A55914
A; Residues: preliminary
A; Rolecule type: DNA
A; Residues: 1-97 cHER>
A; Cross-references: GB:L37369; NID:9565219; PIDN:AAC37326.1; PID:9567100
C; Genetics:
A; Introns: 63/2; 90/2
C; Superfamily: pancreatic hormone
C; Keywords: neuropeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                          Species: Bos primigenius taurus (cattle)
Date: 23-Mar-1995 #sequence_revision 05-Apr-1995 #text_change 16-Jul-1999
Accession: A55914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86.6%; Score 168; DB 2;
llarity 83.3%; Pred. No. 4.1e-15;
Conservative 3; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 156; DB 1;
Pred. No. 5.2e-14;
5; Mismatches 4
                                         1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Mismatches
               1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ch 80.4%;
1 Similarity 75.0%;
27; Conservative
                                                                                                                                                                                       peptide YY precursor - bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
hes 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                            29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                         g
               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
Figorion, J.M.; Balasubramaniam, A.; Hazon, N.
Endocrinology 128, 2273-2279, 1991
A; Fitle: Structural characterization and biological activity of a neuropeptide Y-rela A; Feference number: A49743; MUID:91209266; PMID:2019251
A; Reference number: A49743

                                                                                                                                                                              A;Title: The primary structure of peptide Y (PY) of the spiny dogfish, Squalus acanth A;Reference number: A56893; MUID:92405520; PMID:1526112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Accession: A26377
R; Kimmel, J.R.; Plisetskaya, E.M.; Pollock, H.G.; Hamilton, J.W.; Rouse, J.B.; Ebner, Biochem. Biophys. Res. Commun. 141, 1084-1091, 1986
A; Title: Structure of a peptide from coho salmon endocrine pancreas with homology to A; Reterence number: A26377; MUID:87128023; PMID:3545195
A; Accession: A26377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            pancreatic peptide Y - smaller spotted catshark
N;Alternate names: neuropeptide Y-related peptide
C;Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted dogfish)
C;Date: 07-Apr-1994 #sequence_revision 07-Apr-1994 #text_change 07-May-1999
C;Accession: A49743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
A; Note: this reference is an abstract
R; Pan, J.Z.; Shaw, C.; Halton, D.W.; Thim, L.; Johnston, C.F.; Buchanan, K.D.
Comp. Biochem. Physiol. B 102, 1-5, 1992
A; Title: The primary structure of peptide Y (PY) of the spiny dogfish, Squalu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pancreatic peptide Y - coho salmon
C;Species: Oncorhynchus kisutch (coho salmon)
C;Date: 31-Mar-1988 #sequence_revision 31-Mar-1988 #text_change 06-Dec-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                          A.Molecule type: protein
A.Residues: 1-36 <PANZ>
A.Experimental source: pancreas
A.Note: sequence extracted from NCBI backbone (NCBIP:114876)
C.Superfamily: pancreatic hormone
C.Superfamily: pancreatic hormone
C.Superfamily: pancreatic petide y factous experimental <AMAT>
F:1-36/Modified site: amidated carboxyl end (Tyr) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 156; DB 1;
Pred. No. 5.2e-14;
5; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 156; DB 2;
Pred. No. 5.2e-14;
5; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY
```

ö

Gaps

;

4; Indels

8; Mismatches

Score 147; DB 2; Length 97; Pred. No. 2.5e-12;

```
A) Description: neuropeptide inducing a number of behavioral effects including stimula c; Superfamily: pancreatic hormone c; Superfamily: pancreatic hormone c; Superfamily: pancreatic hormone c; Superfamily: pancreatic hormone; neuropeptide carboxyl end; appetite; hormone; neuropeptide c; 128/Domain: signal sequence *status predicted <AMI>
F; 29-64/Product: neuropeptide Y *status predicted <AMI>
F; 65-97/Domain: carboxyl-terminal propeptide *status predicted <CTP>
F; 64/Modified site: amidated carboxyl end (Tyr) (amide in mature form from following
A;Residues: 1-97 <BLO>
A;Cross-references: GB:M87294; NID:g212458; PIDN:AAA48991.1; PID:g212459
A;Experimental source: central nervous system
A;Note: sequence extracted from NCBI backbone (NCBIP:88404)
C;Function:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29 YPSKPDSPGEDAPAEDMARYYSALRHYINLITRQRY 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: February 27, 2003, 14:38:20 Job time : 46 secs
                                                                                                                                                                                                                                                                                                                                                                                                            75.8%;
66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                               C.Accession: $27054
R.Jensen, J.; Conlon, J.M.
A.Title: Characterization of peptides related to neuropeptide tyrosine and peptide tyros
A.Reference number: $27054; MUID: 93092973; PMID: 1459125
A.Recession: $27054
A.Resique: preliminary
A.Molecule type: protein
A.Resiques: 1-36 <JEN>
C.Superfamily: pancreatic hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Accession: A41979
R;Blomqvist, A.G.; Soderberg, C.; Lundell, I.; Milner, R.J.; Larhammar, D.
Proc. Natl. Acad. Sci. U.S.A. 89, 2350-2354, 1992
A;Title: Strong evolutionary conservation of neuropeptide Y: sequences of chicken, goldf A;Reference number: A41979; MUID:92196116; PMID:1549597
A;Accession: A41979
A;Accession: A41979
A;Accession: A41979
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Accession: S26954
R;Conlon, J.M.; O'Harte, F.
FEBS Lett. 313, 225-238, 1992
A;Thie: The primary structure of a PYY-related peptide from chicken intestine suggests A;Reference number: S26954; MuID: 93076900; PMID: 1446739
A;Accession: S26954
A;Accession: S26954
A;Accession: S26954
C;Superfamily: pancreatic hormone
C;Superfamily: pancreatic hormone
C;Keywords: amidated carboxyl end; hormone; intestine; neuropeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   peptide YY-related protein, intestinal - chicken N.Alternate names: neuropeptide Y homolog; peptide tyrosine-tyrosine-related protein
                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C.Species: Gallus gallus (chicken)
C.Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 21-Jul-2000
                                                                                                                                                                                                                                                                                                                                                                          C;Species: Gadus morhua (Atlantic cod)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Gallus gallus (chicken)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 07-Feb-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 36;
            Score 155; DB 2; Length 36;
Pred. No. 7e-14;
4; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 78.4%; Score 152; DB 2; Best Local Similarity 72.2%; Pred. No. 1.8e-13; Matches 26; Conservative 6; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     75.8%; Score 147; DB 2; 69.4%; Pred. No. 8.3e-13;
                                                                                                                                  1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                    1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 YPPKPESPGDAASPEEIAQYFSALRHYINLVTRQRY 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       neuropeptide Y precursor - chicken
               79.9%;
            Query Match
Best Local Similarity 75.03
Matches 27; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 69.4 Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                              neuropeptide Y - Atlantic cod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A41979
                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
```

ż

```
5.1.3
Compugen Ltd.
 GenCore version
Copyright (c) 1993 - 2003
```

OM protein - protein search, using sw model

February 27, 2003, 14:16:23 ; Search time 29 Seconds
(without alignments)
51.488 Million cell updates/sec Run on:

194 1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36 US-09-634-363-2 Perfect score:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

Seguence:

112892 seqs, 41476328 residues Searched:

112892 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 20000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_40:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	P10082 homo sapien	70	Q9eps2 mus musculu	P10631 rattus norv		P80952 phyllomedus		P09473 lepisosteus	-	P29206 raja rhina	-		P29071 oncorhynchu		_	Q9i9d3 ictalurus p	-	Q918p3 brachydanio	P28673 gallus gall		P09640 oryctolagus		P01303 homo sapien	P57774 mus musculu		ovis	σ	P33689 xenopus lae	~	Q9pt98 dicentrarch	Q9pt99 dicentrarch		P48098 lampetra fl
SUMMARIES	ID	PYY_HUMAN	PYY_PIG	PYY_MOUSE	PYY_RAT	PYY_BOVIN	SPYY_PHYBI	- 1	PYY_LEPSP	PYY_ONCKI	PYY_RAJRH	PYY_BRARE	NEUY_DICLA	NEUY_ONCMY	PYY_RANRI	NEUY_GADMO	NEUY_ICTPU	PYY_CHICK	NEUY_BRARE	NEUY_CHICK	NEUY_PIG	NEUY_RABIT	PYY_ORENI	NEUY_HUMAN	NEUY_MOUSE	NEUY_RAT	NEUY_SHEEP	NEUY_RANRI	NEUY_XENLA	NEUY_CARAU	PY_DICLA			PYY_LAMFL
	Length DB	97 1			98 1				36 1	36 1	36 1	97 1		36 1	36 1	36 1	95 1	37 1				36 1											98 1	93 1
d	Query Match I	100.0	94.8		94.8		83.5	Ξ.	Ö	σ.	ď	Ġ.	6	ω.	ω.	œ.	ė.	S.	ω.	ď.	ů.	74.2	₹.	4	4	4	æ.	'n.	2.	ς.	ä	o.	70.1	6
	Score	194	184	184	184	168	162	158	156	155	155	154	154	153	153	152	149	147	147	147	146	144	144	144	144	144	143	141	141	140	139	137	136	135
	Result No.		7	æ	4	5	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33

between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/

This SWISS-PROT entry is copyright. It is produced through a collaboration

P09641 myoxocephal P48097 lampetra fl	P09475 lophius ame	P80024 petromyzon	PO1302 bos taurus PO1300 sus scrofa	P01299 canis famil	P37999 ceratotheri	P41337 larus argen	P33684 macaca mula		P39659 tapirus pin
PYY_MYOSC NEUY LAMFL	PPY_LOPAM	PMY_PETMA	PAHO_BOVIN	PAHO_CANFA	PAHO_CERSI	PAHO_LARAR	PAHO_MACMU	PAHO_RABIT	PAHO_TAPPI
		٦,		-	٦	-	1	Н	-
36	69	36	131 36	93	36	36	36	36	36
68.6	68.0	62.9	58.2	57.2	56.2	55.2	54.6	54.6	54.6
133	132	122	111	111	109	107	106	106	106
3.4	36	37	20 CC CC CC CC CC CC CC CC CC CC CC CC CC	40	41	42	43	44	45

ALIGNMENTS

```
MEDLINE=90068171; PubMed=2587421; MEDLINE=90068171; PubMed=2587421; Berlein G.A., Eysselein V.E., Schaeffer M., Layer P., Grandt D., Goebell H., Niebel W., Davis M., Lee T.D., Shively J.E., Reeve J.R. Jr.; "A new molecular form of PYY: structural characterization of human PYY(1-35) and PYY(1-35)."; Peptides 10:797-803(1989).

Peptides 10:797-803(1989).

HAS A VASOCONSTRICTORY ACTION AND INHIBITIS JEJUNAL AND COLONIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -:- SUBCELLULAR LOCATION: Secreted.
-:- ALTERNATIVE PRODUCTS: 2 ISOFORMS, A LONG FORM (SHOWN HERE) AND A SHORT FORM; ARE PRODUCED BY ALTERNATIVE SPLICING.
-:- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-Colon mucosa;
MEDLINE-23305732, PubMed-8318545;
Kohri K., Nata K., Yonekura H., Nagai A., Konno K., Okamoto H.;
"Cloning and structural determination of human peptide YY cDNA and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tatemoto K., Nakano I., Makk G., Angwin P., Mann M., Schilling J.,
Go V.L.W.;
                                                                                                                                                                                                                                                           Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (NOV-1993) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Isolation and primary structure of human peptide YY."; Biochem. Biophys. Res. Commun. 157:713-717(1988).
                                                                                                              01-NOV-1995 (Rel. 32, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Peptide YY precursor (PYY) (Peptide tyrosine).
   97 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 29-64, AND SYNTHESIS OF 29-64. MEDLINE=89076307; PubMed=3202875;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Biochim. Biophys. Acta 1173:345-349(1993).
   PRT;
                                                                    01-MAR-1989 (Rel. 10, Created)
01-NOV-1995 (Rel. 32, Last seq
   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Lymphocytes;
                                                                                                                                                                                                                                                                                                                                                                                                                   [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9606;
PYY_HUMAN
P10082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Herzog H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene.
   11D
DD4CD
DD
```

us-09-634-363-2.rsp

```
PYY_MOUSE
                                                                                                          SEQUENCE
                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Signal.
SIGNAL
PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROPEP
MOD_RES
                                                                                                    MOD_RES
                                                                                                                                         Matches
                                                                                                                                                                                              RESULT 3
PYY_MOUSE
ò
                                                                                                                                                                       qq
                                                                                                                                                                                                              ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Isolation and characterization of peptide YY (PYY), a candidate gut
                                                                                                                                                                                      AMIDATION (G-65 PROVIDE AMIDE GROUP).
                                                                                                Pfam: PF00159; hormone3; 1.

PRINTS: PR00278; PANCHORMONE.
SMART; SM00309; PAH; 1.

PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.

PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.

Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;
                                                                                                                                                                                                                                                                                                                                                                         Sus scrofa (Pig), and
Canis familiaris (Dog).
Eukaryota: Metazoa: Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia: Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID=9823, 9615;
                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                   100.0%; Score 194; DB 1; Length 97; 100.0%; Pred. No. 1.1e-19;
                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                              MISSING (IN SHORT ISOFORM).
T -> R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             hormone that inhibits pancreatic exocrine secretion."; Proc. Natl. Acad. Sci. U.S.A. 79:2514-2518(1982).
                                                                                                                                                                                                            /FTId=VAR_006382.
DD16B73407F656A4 CRC64;
                                                                                                                                                                                                                                                                                                                                    21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
16-CCT-2001 (Rel. 40, Last annotation update)
Peptide YY (PYY) (Peptide tyrosine tyrosine).
                                                                                                                                                                                                                                                                  1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                          29 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 64
                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                       PEPTIDE YY.
an email to license@isb-sib.ch)
                                                                                         interPro; IPR001955; Pancreatic_hormn.
                                                                                                                                                                                                                                                                                                                                                                                                                               SPECIES=Pig;
MEDLINE=82222168; PubMed=6953409;
            EMBL; D13897; BAA02997.1; --
EMBL; D13899; BAA0398.1; --
EMBL; D13899; BAA03000.1; --
EMBL; D13902; BAA03002.1; --
EMBL; L25648; AAA36433.1; --
PIR; AA1358; AA3158.
PIR; A60676; A60676.
                                                                                                                                                       Signal; Alternative splicing.
                                                                                                                                                                                                                    11046 MW;
                                                                                                                                                                                                                                         Local Similarity 100.
Les 36; Conservative
                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                          Genew; HGNC:9748; PYY.
                                                                                                                                                                       64
97
97
27
                                                                                                                                                                                                                    97 AA;
                                                                                                                                                                       29
68
64
91
                                                                                  600781;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Tatemoto K.;
                                                                                                                                                                                      MOD_RES
VARSPLIC
                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
send
                                                                                                                                                                                                                                                                                                                     PYY_PIG
P01305;
                                                                                                                                                                       PEPTIDE
                                                                                                                                                                                                     VARIANT
                                                                                                                                                                SIGNAL
                                                                                                                                                                              PROPEP
                                                                                                                                                                                                                                                  Matches
                                                                                    MIM;
                                                                                                                                                                                                                                                                                                      RESULT 2
ò
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAINBALBYC; TISSUE=Liver;
Brown G.J., James R., Eddie L.W.;
Brown G.J., James R., Eddie L.W.;
Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
--- FUNCTION: THIS GUT PEPTIDE INIIBITS EXOCRINE PANCREATIC SECRETION,
--- HAS A VASOCONSTRICTORY ACTION AND INHIBITIS JEJUNAL AND COLONIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AMIDATION (G-65 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide YY precursor (PYY) (Peptide tyrosine tyrosine) (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00309; PAH; 1.
PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
HORMONE; Cleavage on pair of basic residues; Pancreas; Amidation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 184; DB 1; Length 36;
Pred. No. 7.7e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
-:- SUBCELLULAR LOCATION: Secreted.
-:- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY
                                                                                                                                                                                                                                                                                                                                                                                           02CD6B8C586DCC8D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BY SIMILARITY. PEPTIDE YY.
                                                                                                                                                                                                                                                                               PROSITE; PS00265; PANCREATIC_HORMONE_1; 1. PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
                                                                        PIRSP; A60416; A60416.
HSSP; D01303; 1RON.
InterPro; IPR001955; Pancreatic_hormn.
Pfam; PF00159; hormone3; 1.
PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
SMART; SM00309; PAH; 1.
                                                                                                                                                                                                                                                                                                                                                                       AMIDATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP; P01303; IRON.
MGD; MG159924; Pyy.
InterPro; IPR001955; Pancreatic_hormn.
Pfam; PF00159; hormone3; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOBILITY. SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AF325866; AAG42908.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                     94.88;
                                                                                                                                                                                                                                                                                                                                                                                              36 AA; 4242 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28
28
793
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                       Hormone; Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                       PIR; A01574; YYPG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1
29
68
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-OCT-2001
15-JUN-2002
```

```
PYY_BOVIN
P51694;
                                              MOD_RES
SEQUENCE
 Signal.
SIGNAL
PEPTIDE
PROPEP
                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PEPTIDE
PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIĞNAL
                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                        RESULT 5
PYY_BOVIN
  ETT TET SO
                                                                                                                               Óγ
                                                                                                                                                    g
                                                                                                                                                                                                               ò
                                                         ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=88321122; PubMed=3413293;
Corder R., Gaillard R.C., Boehlen P.;
"Isolation and sequence of rat peptide YY and neuropeptide Y.";
Regul. Pept. 21:253-261(1988).
-!- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,
HAS A VASOCONSTRICTORY ACTION AND INHIBITIS JEJUNAL AND COLONIC
                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-91367188; PubMed-1890992;
Krasinski S.D., Wheeler M.B., Leiter A.B.;
"Isolation, characterization, and developmental expression of the rat
peptide YY gene."
Mol. Endocrinol. 5:433-440(1991).
                                                          Gaps
                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                 Mandel G., Goodman R.H.; "Peptide YY. Structure of the precursor and expression in exocrine pancreas.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
Hormone; Cleavage on pair of basic residues; Pancreas; Amidation;
                                                         0
                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDILE-88007492; PubMed=3654598;
Leiter A.B., Toder A., Wolfe H.J., Taylor I.L., Cooperman S.
Mandel G., Goodman R.H.;
                                   Length 93;
                                                          Indels
                                                                                                                                                                                                                         Peptide YY precursor (PYY) (Peptide tyrosine tyrosine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
            2320990F05992030 CRC64;
                                 Score 184; DB 1;
Pred. No. 2.4e-18;
                                                                                                                                                                                    01-JUL-1989 (Rel. 11, Created)
01-JUL-1989 (Rel. 11, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
                                                                               1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                             98 AA
                                                        1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PIR; A29364; A29564.
PIR; A37955; A37955.
HSSP; P01303; IRON.
InterPro; IRR001955; Pancreatic_hormn.
Pfam; PF00159; hormone3; 1.
PrinTs; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
SMART; SM00309; PAH; 1.
                                                                                                                                                                                                                                                                                                                                                                             . Biol. Chem. 262:12984-12988(1987).
                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBCELLULAR LOCATION: Secreted
         10481 MW;
                                 94.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; S57220; AAB19752.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA41222.1; -.
                                                        34; Conservative
                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                Rattus norvegicus (Rat)
                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 29-64.
93
93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                  NCBI_TaxID=10116;
NON_TER
SEQUENCE
                                   Query Match
                                                                                                                                                                PYY_RAT
P10631;
                                                        Matches
                                                                                                                                                    PYY_RAT
                                                                                                     g
                                                                                                                                                                FT
                                                                               ò
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neuropeptide Y gene family.";
Proc. Natl. Acad. Sci. U.S.A. 92:594-598(1995).
-!- FUNCTION: THIS GUT PEPTIDE INHIBITS EXOCRINE PANCREATIC SECRETION,
HAS A VASOCONSTRICTORY ACTION AND INHIBITIS JEJUNAL AND COLONIC
                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoldea;
Bovidae; Bovinae; Bos
                                                                            AMIDATION (G-65 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
HORMONE; Cleavage on pair of basic residues; Pancreas; Amidation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AMIDATION (G-65 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-95132646; PubMed-7831336;
Herzog H., Hort Y., Schneider R., Shine J.;
"Seminalplasmin: recent evolution of another member of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 168; DB 1; Length 97; Pred. No. 3.8e-16; 3; Mismatches 3; Indels
                                                                                                                                                 Score 184; DB 1; Length 96
Pred. No. 2.6e-18;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-ocT-1996 (Rel. 34, Created)
01-ocT-1996 (Rel. 34, Last sequence update)
16-ocT-2001 (Rel. 40, Last annotation update)
Peptide YY precursor (PYY) (Peptide tyrosine tyrosine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
                                                                                                    994C0C3AD6A8A7DE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B3A7B6A768BB3AE0 CRC64;
                                                                                                                                                                                                                                                        1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                   29 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                       97 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BY SIMILARITY.
PEPTIDE YY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Mismatches
                             PEPTIDE YY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR001955; Pancreatic_hormn.
Pfam; PF00159; hormone3; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBCELLULAR LOCATION: Secreted
28
64
98
64
11121 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11092 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; L37369; AAC37326.1; -. HSSP; P01303; IRON.
                                                                                                                                                         94.88;
                                                                                                                                                                              94.48;
                                                                                                                                                                                                         34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28
64
97
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART: SM00309: PAH: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                taurus (Bovine).
                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1
29
68
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9913
```

g

```
MEDLINE=91296574; Pubmed=2067973;
                                                                                                                                                                                                                                                                                                            81.4%;
77.8%;
                                                                                                                                                                                                                                                             MOD_RES 36 36 SEQUENCE 36 AA; 4333 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=7917, 7830, 7797;
                                                                                                                                                                                                                                                                                                                          Local Similarity 77.8
nes 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                               Hormone; Amidation.
TISSUE=Pancreas;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PYY_LEPSP
P09473;
                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PYY_LEPSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
 δλ
                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                             Vouldoukis I., Shai Y., Nicolas P., Mor A.;
"Broad spectrum antibiotic activity of skin-pyv.";
FEBS Lett. 380:237-240(1996).
-!- FIBS Lett. 380:237-240(1996).
-!- FUNCTION: SHOWS A BROAD SPECTRUM OF ANTIBACTERIAL ACTIVITY AGAINST
GRAM-POSITIVE AND GRAM-NEGATIVE BACTERIA, YEAST AND FUNGI.
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: SKIN.
-!- SIMILARITY: BELONGS TO THE NPY / PPY PAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                     polypeptide family: isolation, structure, synthesis, and endocrine activity.";
                                                                                                                                                                  Skin peptide tyrosine-tyrosine (SPYY).
Phyllomedusa blocolor (Two-colored leaf frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amia calva (Bowfin).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Amiiformes; Amiidae; Amia.
NCBI_TaxID=7924;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                          TISSUE-Skin;
MEDLINE-99024100, PubMed-7937944;
MOT A., Chartrel N., Vaudry H., Nicolas P.;
"Skin peptide tyrosine-tyrosine, a member of the pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PSO2055; PANCREATIC_HORMONE_1; 1.
PROSITE; PSO276; PANCREATIC_HORMONE_2; 1.
Amphibian skin; Fungicide; Hormone; Amidation. MOD_RES 36 AMIDATION (BY SIMILARITY).
SEQUENCE 36 AA; 4265 MW; 0725D316031827AE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                   Proc. Natl. Acad. Sci. U.S.A. 91:10295-10299(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83.5%; Score 162; DB 1; 77.8%; Pred. No. 7.6e-16;
                                                                                                                    01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-1992 (Rel. 24, Created)
01-DEC-1992 (Rel. 24, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
29 YPAKPQAPGEHASPDELNRYYTSLRHYLNLVTRQRF 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00159; hormone3; 1.
PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR001955; Pancreatic_hormn.
                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-96186932; PubMed-8601432;
                                                                                                                                                                                                                               Phyllomedusinae; Phyllomedusa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 77.8 Matches 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide YY-like (PYY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART; SM00309; PAH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSSP; P01303; 1RON.
                                                                                                                                                                                                                                                                                                                                                                                                                   CHARACTERIZATION.
                                                                                                                                                                                                                                               NCBI_TaxID=8393;
                                                                                      SPYY_PHYBI
P80952;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PYY_AMICA P29205;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  [1]
SEQUENCE.
                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                         SPYY_PHYBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
PYY_AMICA
                                                           RESULT 6
```

qq

ð

```
Conlon J.M., Bjenning C., Moon T.W., Youson J.H., Thim L.;

Conlon J.M., Bjenning C., Moon T.W., Youson J.H., Thim L.;

"Neuropeptide Y-related peptides ffrom the pancreas of a teleostean (eel), holostean (bowfin) and elasmobranch (skate) fish.";

Peptides 12:21-226(1991).

- SUBCELLULAR LOCATION: Secreted.
- I- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.

R HSSP; P01303; 1RON.
R HSSP; P01303; 1RON.
R Pfam: PF00159; Pancreatic_hormn.
R Pfam: P001267; Pancreatic_hormn; 1.

R SMART; SM00309; PAK: LATIC_HORMONE_1; 1.

R PROSITE; PS002055; PANCREATIC_HORMONE_1; 1.

R PROSITE; PS002055; PANCREATIC_HORMONE_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pan J.-Z., Shaw C., Halton D.W., Thim L., Johnston C.F., Pan J.-Z., Shaw C., Halton D.W., Thim L., Johnston C.F., Fairweather I., Buchanan K.D.;

Fairweather I., Buchanan K.D.;

Fishlation and primary structure of the peptide Y from the pancreas of the spiny dogfish, Squalus acanthias.";

Regul. Pept. 35:252-228(1991).

-i- FUNCTION: ELICITS AN INCREASE IN ARTERIAL BLOOD PRESSURE.

-i- FUNCTION: Secreted.

-i- SIBMELAULAR LOCATION: Secreted.

-i- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pollock H.G., Kimmel J.R., Hamilton J.W., Rouse J.B., Ebner K.E., Lance V., Rawitch A.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Isolation and structures of alligator gar (Lepisosteus spatula) insulin and pancreatic polypeptide."; Gen. Comp. Endocrinol. 67:375-382(1987):
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
01-MAR-1980 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Peptide YY-like (PYY) (Neuropeptide Y-related peptide).
Lepisosteus spatula (Alligator gar) (Atractosteus spatula),
Scyliorhinus canicula (Spotted dogfish) (Spotted catshark), and
Squalus acanthias (Spiny dogfish).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conlon J.M., Balasubramaniam A., Hazon N.;
"Structural characterization and biological activity of a
neuropeptide Y-related peptide from the dogfish, Scyliorhinus
canicula.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Actinopterygii; Neopterygii; Semionotiformes; Lepisosteidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 158; DB 1; Length 36;
Pred. No. 2.7e-15;
3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AMIDATION.
56B46F3C08666671 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE, AND SYNTHESIS.
SPECIES=S.canicula; TISSUE-Pancreas;
MEDLINE=91209266; PubMed=2019251;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPECIES=L.spatula; TISSUE=Pancreas;
MEDLINE=88030594; PubMed=3311873;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Endocrinology 128:2273-2279(1991).
```

ö

S

```
PYY_RAJRH
P29206;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PYY_BRARE
Q918P2;
                         Hormone; 1
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                          RESULT 10
                                                                                                                                                                                                                                                                                                              PYY_RAJRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PYY_BRARE
                                                                                                                                                                                                                           qq
      NAME
                                                                                                                                                                                         ď
                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SPECIES-O.mykiss; TISSUB-Brain, and Stomach;
MEDLINE-3030973; Pubbed=1459125;
Jensen J., Conlon J.M.,
"Characterization of Peptides related to neuropeptide tyrosine and
peptide tyrosine-tyrosine from the brain and gastrointestinal tract
of teleost fish."; 210:405-410(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptide YT-like (PYY).
Oncorhynchus Kisutch (Cho salmon), and
Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Blkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kimmel J.R., Plisetskaya E.M., Pollock H.G., Hamilton J.W., Rouse J.B., Ebner K.E., Rawitch A.B.; Structure of a peptide from coho salmon endocrine pancreas with homology to neuropeptide Y."; Biochem. Biophys. Res. Commun. 141:1084-1091(1986).
                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                              Length 36;
                                                                                                                                                                                                                                                                                                                                                      4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SPECIES-O.mykiss; TISSUE-Brain;
MEDLINE-93157164; PubMed-1494498;
Barton C.L., Shaw C., Halton D.W., Thim L.;
Rainbow trout (Oncorhynchus mykiss) neuropeptide Y.";
Peptides 13:1159-1163(1992).
-! SUBCELLULAR LOCATION: Secreted.
-! SIMILARIY: BELONGS TO THE NPY / PPY / PYY FAMILY.
PIR; A26377; A26377.
InterPro; IPR001955; Pancreatic_hormn.
                                                                                                                                                                                                                                              AMIDATION.
56A6D8CC086660AA CRC64;
                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                         Score 156; DB 1;
Pred. No. 5e-15;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-1989 (Rel. 10, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                             1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam: PF00159; hormone3; 1.
PRINTS: PR00278; PANCHORMONE.
PRINTS: SN001207; Pancreatic_hormn; 1.
SMART: SN00309; PAH: 1.
PROSITE: PS00265; PANCREATIC_HORMONE_1; 1.
                                                                                                                                                                              PROSITE; PS00265; PANCREATIC_HORMONE_1; 1. PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
                                                                            InterPro; IPR001955; Pancreatic_hormn. Pfam; PF00159; hormone3; 1. PRINTS; PR00278; PANCHORMONE. ProDom; PD001267; Pancreatic_hormn; 1. SMART; SM00309; PAH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPECIES=0.kisutch; TISSUE=Pancreas;
MEDLINE=87128023; PubMed=3545195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-1989 (Rel. 10, Created)
                                                                                                                                                                                                                                                                                                         80.4%;
75.0%;
                                                                                                                                                                                                                                                36 36
36 AA; 4291 MW;
                                                                                                                                                                                                                                                                                                       Query Match 80.4
Best Local Similarity 75.0
Matches 27; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                     PCDFY.
A49743.
                                                                                                                                                                                                                           Hormone; Amidation.
                                                             1RON.
PIR; S07215; PPIR; A60022; PPIR; A49743; A.HSSP; P01303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PYY_ONCKI
P09474;
                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                              MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PYY_ONCKI
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11D
DDT DDT BERNE 
  ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchii; Squalea; Hypnosqualea; Pristiorajea; Batoidea;
Rajiformes; Rajidae; Raja.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                            Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 36;
                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                              AMIDATION.
56A6D8CC08666671 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AMIDATION.
07A7D9DC196660B6 CRC64;
                                                                            Score 155; DB 1; L
Pred. No. 6.9e-15;
4; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 155; DB 1;
Pred. No. 6.9e-15;
7; Mismatches 3;
                                                                                                                                                                                                                                                                                      01-DEC-1992 (Rel. 24, Created)
01-DEC-1992 (Rel. 24, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Peptide YY precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                           97 AA.
                                                                                                                                                                                                                                                           36 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART; SM00309; PAH; 1.
PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR001955; Pancreatic_hormn. Pfam; PF00159; hormone3; 1. PRINTS; PR00278; PANCHORMONE. ProDom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                           PRT;
                                                                            79.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79.98;
72.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hormone, Amidation.
MOD_RES 36 36
SEQUENCE 36 AA; 4251 MW;
                              36 36
36 AA; 4305 MW;
                                                            Query Match
Best Local Similarity 72.2*
                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                       Peptide YY-like (PYY).
Raja rhina (Skate).
               Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=30478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cyprinidae; Dani
NCBI_TaxID=7955;
```

9

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Blainformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
Neuropeptide; Cleavage on pair of basic residues; Signal; Amidation.
SIGNAL 1 28 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AMIDATION (G-65 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
NCBI_TaxID=8022;
     Cerda-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.
                               Larhammar D.; "Deduced peptide sequence of neuropeptide Y exon 2 from sea bass
                                                                                  (Dicentrarchus labrax).";
Submitted (APF-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN
SECRETION OF GONADOTROPHIN-RELEASE HORMONE.
                                                                                                                                                                                        -!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4EEFAED164964184 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 154; DB 1;
Pred. No. 3.2e-14;
6; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-DEC-1992 (Rel. 24, Created)
01-DEC-1992 (Rel. 24, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRORY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NEUROPEPTIDE Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR001955; Pancreatic_hormn
Pfam; PF00159; hormone3; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-93092973; PubMed-1459125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AJ005378; CAB64932.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Prum, Prof. Prof. Prof. Prof. Prof. Prof. Prof. Prof. Prof. Pancreatic SMART; SM00309; PAH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 64
99 AA; 11260 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79.48;
72.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AJ005381; CAB64935.1;
HSSP; P01303; 1RON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Neuropeptide Y (NPY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29
68
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Simi
Matches 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NEUY_ONCMY P29071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NEUY_ONCMY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
     Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license else-ment (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Neuropeptide Y, endocrine gut peptide YY and fish pancreatic peptide Y expression in the brain of a teleost fish (Dicentrarchus labrax): from cloning to evolutionary considerations."; Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dicentrarchus labrax (European sea bass).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                            "Zebrafish genes for neuropeptide Y and peptide YY reveal origin by chromosome duplication from an ancestral gene linked to the homeobox
        Soderberg C., Washith A., Ringvall M., Yan Y.L., Postlethwait J.H., Brodin L., Larhammar D.; "Zebrafish genes for neuropeptide Y and pentide vv rouses over the beautiful by the second pentide of the beautiful by the beautiful b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cerda-Reverter J.M., Martinez-Rodriguez G., Zanuy S., Carrillo M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PEPTIDE YY.

C-TERMINAL EXTENSION (BY SIMILARITY).

AMIDATION (G-65 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
Hormone; Cleavage on pair of basic residues; Amidation; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                                                            J. Neurochem. 75:908-918(2000).
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE NPY / PPY FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (POTENTIAL).
96EA07EF0991AC2D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 154; DB 1;
Pred. No. 3.1e-14;
6; Mismatches 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NEUY_DICLA STANDARD; PRT; 99 AA. Q9PTAO; Q9PTAO; (QPTAO) 16-OCT-2001 (Rel. 40, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZEIN; ZDB-CENE-980526-71; pyy.
InterPro; IPR001955; Pancreatic_hormn.
Pfam; PR00159; hormone3; 1.
PRINTS; PR00278; PANCHORMONE.
PRODOM; PD001267; Pancreatic_hormn; 1.
SWART; SM00309; PAH; 1.
MEDLINE=20396163; PubMed=10936170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Neuropeptide Y precursor (NPY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AF233875; AAF79942.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11175 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 1-62 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dicentrarchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28
64
97
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
nes 26; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P01303; 1RON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=13489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1
29
68
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-Blood;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Larhammar D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Neuropeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Moronidae;
                                                                                                                                        cluster."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEUY_DICLA
```

Matches

ò g

RRARARA RRARA RRAR

RESULT 12

ö

Gaps

ö

36 AA

Length 99; Indels us-09-634-363-2.rsp

```
1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                   Rana ridibunda (Laughing frog) (Marsh frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
NCBI_TaxID=8406;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gadus morhua (Atlantic cod).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conlon J.M., Chartrel N., Vaudry H.,
"Primary structure of frog PYY: implications for the molecular
evolution of the pancreatic polypeptide family.";
Peptides 13:145-149(1992).
-: SUBCELLULAR LOCATION: Secreted.
-: SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                       Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 36;
                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                          AMIDATION.
E2A32293A866611C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AMIDATION.
0725C3CC6304F663 CRC64;
                                                                                                                                                 Score 153; DB 1; I
Pred. No. 1.3e-14;
5; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 78.9%; Score 153; DB 1; L
Best Local Similarity 75.0%; Pred. No. 1.3e-14;
Matches 27; Conservative 4; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                              16-OCT-2001 (Rel. 24, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Peptide YY-like (PYY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-DEC-1992 (Rel. 24, Created)
01-DEC-1992 (Rel. 24, Last sequence update)
01-JUN-2002 (Rel. 41, Last annotation update)
Neuropeptide Y (NPY).
Pfam; PF00159; hormone3; 1.
PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
SWART; SW00309; PAH; 1.
PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
Neuropeptide, Amidation.
MOD_RES 36 36 AMIDATION.
SEQUENCE 36 AA; 4311 MW; E2A32293A866611C
                                                                                                                                                                                                                             1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                        36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSSP; P01303; IRON.
InterPro: IPR001955; Pancreatic_hormn.
Pfan: PF00159; hormone3: 1.
PRINTS; PR00278; PANCHORNONE.
ProDom: PD001267; Pancreatic_hormn; 1.
SMART; SM00309; PAH; 1.
PROSITE; PS00265; PANCREATIC_HORMONE_1: 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Intestine; MEDLINE=92319697; PubMed=1620652;
                                                                                                                                                                                                                                                                                                                                                   01-DEC-1992 (Rel. 24, Created)
                                                                                                                                                  Query Match 78.9%;
Best Local Similarity 72.2%;
Matches 26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36 36
36 AA; 4279 MW;
                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hormone; Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NEUY_GADMO
P80167;
                                                                                                                                                                                                                                                                                                                   PYY_RANRI
P29204;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEUY_GADMO
                                                                                                                                                                                                                                                                                       RESULT 14
PYY_RANRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
    DR DR DR DR KW KW KW
                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
ö
                                                                                                                                                                                                                         Table 1. Contracterization of peptides related to neuropeptide tyrosine and peptide tyrosine-tyrosine-tyrosine from the brain and gastrointestinal tract of telecost fish."

To felecost fish."

Eur. J. Biochem. 210.405-410(1992).

-!- FUNCTION. NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN SECRETION OF GONADOTROPHIN-RELEASE HORMONE.

-!- FUNCTION. NPY IS IMPLICATED IN THE CONTROL OF FEEDING AND IN SECRETION OF GONADOTROPHIN-RELEASE HORMONE.

-!- SUBJECTIOLAR LOCATION: Secreted.

-!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.

R HSSP: P01303: 1RON.

R HSSP: P01303: 1RON.

R HSSP: PRO0159; PANCHORMONE.

R PRINTS; PRO0159; PANCHORMONE.

R PRINTS; PRO01267: PANCHORMONE.

R SMART; SM0309; PAH: ILLALC_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae; Gadus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  78.4%; Score 152; DB 1; Length 36; 72.2%; Pred. No. 1.8e-14; ive 6; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AMIDATION.
17B09AA83867A7B6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00265; PANCREATIC_HORMONE_1; 1. PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
                                                                                                                                             TISSUE=Brain;
MEDLINE=93092973; PubMed=1459125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36 AA; 4267 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Neuropeptide; Amidation.
                                                                                                                                                                                                            Jensen J., Conlon J.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
nes 26; Conserv
                               Acanthomorpha; Pa
NCBI_TaxID=8049;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
```

Search completed: February 27, 2003, 14:36:51 Job time : 30 secs

THIS PAGE BLANK (USPTO)

```
9
35
69
17
                                                                                                    February 27, 2003, 14:32:08; Search time 29 Seconds (without alignments) 255.783 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                               671580
            GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                  194
1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                              671580 seqs, 206047115 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                          OM protein - protein search, using sw model
                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sp_vertebrate:*
sp_unclassified:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sp_fungi:*
sp_human:*
sp_invertebrate:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sp_mammal:*
sp_mhc:*
sp_organelle:*
sp_phage:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sp_rvirus:*
sp_bacteriap:*
                                                                                                                                                                                                                                                                                                                                            seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sp_archea:*
sp_bacteria:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sp_plant:*
sp_rodent:*
sp_virus:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sp_archeap:*
                                                                                                                                                                   US-09-634-363-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SPTREMBL_21:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44...
55...
110...
112...
114...
115...
                                                                                                                                                                                  Perfect score:
                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                          Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                     Sequence:
                                                                                                         Run on:
```

09tr93 oryctolagus 09tr93 oryctolagus 09tr92 oryctolagus 090wf4 paralichthy 09i9d3 ictalurus p 09dgk7 cyprinus ca 09n0m5 sus scrofa 09sww macaca mula 0925v2 mus musculu 09tsi6 ovis aries 08spf7 ovis aries O99w68 typhlonecte 090wf3 paralichthy 09ps46 scyliorhinu 090wf2 paralichthy 09gkl0 sus scrofa Description Q9TR93 Q9TR92 Q90WF4 Q919D3 Q9DGK7 Q9DGK7 Q9XSW6 Q9XSW6 Q9XSV6 Q9XSV6 09PS46 090WF2 09GKL0 Q9PW68 Q90WF3 6 113 113 113 6 6 6 7 113 Query Match Length DB

; 0

Gaps . 0

Length 36; 1; Indels

Score 188; DB 6; Pred. No. 2.3e-18; 0; Mismatches 1;

96.98;

Query Match 96.99 Best Local Similarity 97.29 Matches 35; Conservative

QQ ò

09ps51 lampetra fl 09nti6 homo sapien 090059 lymnaea sta 027441 aplysia cal 08qmy3 cowpox viru 09792 streptcoccc 038017 salmonid he 09131 neurospora p95814 streptcomyce 091218 streptcomyce 091218 streptcomyce 091581 neurospora 091581 neurospora 091581 neurospora 091581 streptcomyce 09439 pneumocysti 096439 pneumocysti 096443 pneumocysti 096446 homo sapien 096415 homo sapien 096410 homo sapien 09640 homo sapien 09640 homo sapien 09640 homo sapien 09669 homo sapien 085340 acenorhabdi 085340 sereptcomyce 094043 ms musculu 094407 streptcomyce 094043 ms musculu 094604 ms musculu 094605 homo sapien	ALIGNMENTS	reated) ast sequence update) ast sequence update) ast annotation update)). Craniata; Vertebrata; Euteleostomi; a; Leporidae; Oryctolagus. 499; uk K., Shively J., Eysselein V.E., s of peptide YY, PYY(1-36) and PYY(3-36), E NPY / PPY / PYY FAMILY. ic_hormn. hormn; 1. HORMONE_1; 1. HORMONE_1; 1.
Q9PS51 Q9NR16 Q9U0S9 Q27441 Q8QMY3 Q97Q92 Q9TM13 Q9PS14 Q9F243 Q9F243 Q9C04 Q9V5H6 Q9C04 Q9V5H6 Q9V5H6 Q9C04 Q9V5H6 Q9C06 Q9C06 Q9C06 Q9C06 Q9C07 Q9C0	ALIGN	Lrel. 13, Created) Lrel. 13, Last seque Lrel. 18, Last annot. 36). Lus (Rabbit). Lus (Rabbit). Lus Chordata: Creniata Chordata: Creniata Lagomorpha: Lepori. Lagomorpha: Lepori. Lagomorpha: Lepori. Chordata: Craniata Chordata: Craniata Chordata: Craniata Chordata: Craniata Chordata: Craniata Chordata: Craniata Chordata: Chorm. Coll94). Longs To THE NPY / Pr ANCHORMONE. PANCREATIC_HORMONE. PANCREATIC_HORMONE. PANCREATIC_HORMONE.
113 110 110 110 110 110 110 110 110 110		13, 18, 18, 18, 18, 10, 10, 11, 10, 11, 11, 11, 11, 11, 11
21 33 88 98 98 98 97 77 64 64 98 98 98 98 98 98 98 98 98 98		(Tremblrel 13, Cre (Tremblrel 13, Las (Tremblrel 18, Las PY(1-36). Rediolous (Rabbit). Redzoa: Chordata; Belong To THE 1180N.
24 20 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		PRELIMI D0 (TTEMBL) 00 (TTEMBL) 11 (TTEMBL) 12 PY(1-3 13 cuntoul 14 PATAZOS; 15 SCHIMICS; 16 SCHIMICS; 17 PORTONO 18 PORTONO
		R93 MAX-2000 MAX-2000 MAX-2000 Ctolagus ctolagus ctolagus ctolagus ctolagus malia; E I_TaxID= UENCE. LINE=950 LINE=950 LINE=950 LINE=950 LINE=950 Bell H., aracteri tide rab SIMICAR SIMICAR PP PO0130 PP PO0130 MYS; PRO NTS; PRO NTS; PRO NTS; PRO NTS; PRO SITE; PS SITE; PS
11112222222222222222222222222222222222		RESULT 1 209TR93 AC 099T AC 09
		NA N

34

2 KPEAPGEDASPEELNRYYASLRHYLNLVTRQRY

g

~

RESULT 2 Q91XD0

```
PROSITE; PS00265; PANCREATIC_HORMONE_1; PROSITE; PS50276; PANCREATIC_HORMONE_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 69.4 Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                PRELIMINARY;
                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                           Neuropeptide Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Neuropeptide Y
                                                                                                                                                                                                                                                                   TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=BRAIN;
                                                            01-DEC-2001
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                 olivaceus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                               090WF4;
                              Q90WF4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q919D3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
RESULT 4
                Q90WF4
                                               ōλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grandt D., Schimiczek M., Struk K., Shively J., Eysselein V.E.,
Goebell H., Reeve J.R.Jr.;
"Characterization of two forms of peptide YY, PYY(1-36) and PYY(3-36),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide YY, PYY(3-36).
Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                        Query Match 94.8%; Score 184; DB 11; Length 98; Best Local Similarity 94.4%; Pred. No. 2.4e-17; Matches 34; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 90.7%; Score 176; DB 6; Length 34 Best Local Similarity 100.0%; Pred. No. 9.1e-17; Matches 33; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                              Strausberg R.;
Strausberg R.;
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC010821; AAH10821.1;
InterPro: IPR00195; Pancreatic_hormn.
Pfan; PP00159; hormone3; 1.
ProDom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00265; PANCREATIC_HORMONE_1; UNKNOWN_1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
SEQUENCE 98 AA; 11064 MW; 7AF165A1052C3249 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          34 AA; 4024 MW; 02D4E9C38BA5FC8D CRC64;
                                          01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DRC-2001 (TrEMBLrel. 20, Last annotation update)
Unknown (protein for MGC:19143).
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2001 (TrEMBLrel. 18, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                       1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                       29 YPAKPEAPGEDASPEELSRYYASLRHYLNLVTRQRY 64
            98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00265; PANCREATIC_HORMONE_1; 1. PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 KPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00159; hormone3; 1.
Probom; PD001267; Pancreatic_hormn; 1.
SMART; SM00309; PAH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-95075735; PubMed-7984499;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
              PRELIMINARY;
                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                      NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9986
                                                                                                                                                                                                    TISSUE-COLON;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
           091XD0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9TR92
```

RESULT 3 Q9TR92

ò

g ò

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Actinopterygli; Neopterygli; Teleostei; Ostariophysi; Siluriformes; Ictaluridae; Ictalurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Leonard J.B.K., Waldbieser G.C., Silverstein J.T.;
"Neuropeptide Y (NPY) sequence and distribution in channel catfish (Ictalurus punctatus).";
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: BELONGS TO THE NPY / PPY FAMILY.
EMBL; AF267164; AAF71617.1; --
                                                                                                                                                                                                                 Paralichthys olivaceus (Flounder).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Eukaryota; Neopieryaji; Teleostei; Euteleostei; Neotielostei;

Acanthomorpha; Acanthopteryaji; Percomorpha; Pleuronectiformes;

Pleuronectoidei; Paralichthyidae; Paralichthys.

NCBI_TaxID=8255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kurokawa T., Suzuki T.; "Development of neuropeptide Y related peptides in the digestive organs during the larval stage of Japanese flounder, Paralichthys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             77.8%; Score 151; DB 13; Length 99;
69.4%; Pred. No. 7.1e-13;
Live 7; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AB052211 BAB62409.1; -...
InterPro. IPRO1955; Pancreatic_hormn.
Pfam; PF00159; hormone3; 1.
ProDom; PD001267; Pancreatic_hormn; 1.
PROSITE; PS00265; PANCREATIC_HORNONE_1; UNKNOWN_1.
PROSITE; PS02026; PANCREATIC_HORNONE_2; 1.
SEQUENCE 99 AA; 11215 MW; 6FEED47F24CF6498 CRC64;
                                                                                           Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-2000 (TrEMBLrel. 15, Last sequence update) 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29 YPVKPENPGDDAPAEELAKYYSALRHYINLITRQRY 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95 AA
99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00159; hormone3: 1.
PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
SMART; SM00309; PAH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HSSP; P01303; 1RON.
InterPro; IPR001955; Pancreatic_hormn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ictalurus punctatus (Channel catfish)
                                                                Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-2000 (TrEMBLrel. 15, 01-OCT-2000 (TrEMBLrel. 15,
                                                         01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2002 (TrEMBLrel. 20,
```

.; 0

ó

Gaps

ö

Q9DGK7

RESULT 6

ò g

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
Abler L.A., Golos T.G., Terasawa E.;
"Developmental changes in NPY mRNA expression in female rhesus
                                                                                                                                                                                                                                                                                                                                                              Score 146; DB 6; Length 76;
Pred. No. 2.5e-12;
5; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 144; DB 6; Length 97;
Pred. No. 6.2e-12;
7; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
-! SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
EMBL; AF162298; AAD43583.1; -.
HSSP: P01303; 1RON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97 AA; 10840 MW; 2D2209BAC20BD5EE CRC64;
                                                                                                                                                                                                                                                                                                             84E40EC2A4F94B2C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 YPSKPDNPGEDAPAEDLARYYSALRHYINLITRQRY 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NEUROPEPTIDE Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                    6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMARY; SM00309; PAH; 1.
PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
                                                                                                                          SMART; SM00309; PAH; 1.
PROSITE; PS00265; PANCREATIC_HORMONE_1;
PROSITE; PS50276; PANCREATIC_HORMONE_2;
                     InterPro; IPR001955; Pancreatic_hormn.
Pfam; PR00129; hormnone3; 1.
PRIMTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Interpro; IPR001955; Pancreatic_hormn.
Pfam; PF00159; hormone3; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Macaca mulatta (Rhesus macaque).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74.28;
                                                                                                                                                                                                                                                                                                                                                                75.3%;
                                                                                                                                                                                                                                                                                                             8596 MW;
                                                                                                                                                                                                                                                                                                                                                                                              69.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2002 (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Neuropeptide Y (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                           Amidation; Neuropeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cercopithecinae; Macaca
NCBI_TaxID=9544;
                                                                                                                                                                                                                                                            >45
HSSP; P01303; 1RON
                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                             76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Neuropeptide Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amidation.
                                                                                                                                                                                                                                                                                    NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                 NON_TER
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            monkeys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0925V2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q925V2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9MSX60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9MSX60
                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
Q9XSW6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
Q925V2
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AC DD T B DD T DD T B DD T DD T B DD T 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ολ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Yingwen L. Takeshi Y.;
"Daily rhythmic gene expression of neuropeptide Y in discrete brain of common carp. Cyprinus carpio, under the condition of self feeding.";
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
BERBL; PA287347; AAG00549.1;
-- HSSP; P01303; IRON.
InterPro; IPR001955; Pancreatic_hormn.
                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Neuropeptide Y. Cyprinus carpio (Common carp).
Cyprinus carpio (Common carp).
Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostoml;
Actinopterygii: Neopterygii: Teleostel; Ostariophysi: Cypriniformes;
Cyprinidae: Cyprinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Proneuropeptide Y (Fragment).
Sus scrofa (Pig).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                         Length 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 96;
                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
EMBL; AF264083; AAF72538.1; -.
                     9AE19EAFBE24C6B5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 AA; 10987 MW; C6C5ABCD87688980 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                         01-WAR-2001 (TrEMBLrel. 16, Created)
01-WAR-2001 (TrEMBLrel. 16, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                      Score 149; DB 13;
Pred. No. 1.3e-12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 147; DB 13;
Pred. No. 2.4e-12;
                                                                                                                                                                          1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                        28 YPTKPENPGEDAPVEELAKYYSALRHYINLITRQRY 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     76 AA
                                                                                                                          5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE: PS00265; PANCREATIC_HORMONE_1; 1. PROSITE; PS50276; PANCREATIC_HORMONE_2: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00159; hormone3; 1.
PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
SMART; SM00309; PAH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                PRT;
                  95 AA; 10729 MW;
                                                                      76.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75.8%;
                                                           Query Match 76.8 Best Local Similarity 72.2 Matches 26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 69.4 es 25; Conservative
                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
TISSUE=HYPOTHALAMUS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matteri R.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9N0M5
Q9N0M5;
```

Matches

ô

ö

Gaps

ö

ΑA

```
PRT;
   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-21184972; PubMed-11287086;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Neuropeptide Y precursor (NPY).
                                                                                                                                                                                                                                                                                                                                                                                    10750 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                   73.78;
66.78;
                                01-JUN-2002 (TrEMBLrel. 21, 01-JUN-2002 (TrEMBLrel. 21, 01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00159; hormone3; 1
                                                                                  Neuropeptide Y precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                      28
64
97
                                                                                                                                                                                                                                                                                                                                                                                    97 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 Similarity
24; Conser
                                                                                                                                                                                   NCBI_TaxID=9940;
                                                                                                                                                                                                                                                                                                                                                   29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=8456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SPECTROMETRY
                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q9PW68;
               08SPF7
                                                                                                                                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09PW68
                                                                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09PW68
   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                     Taylor B.A., Wnek C., Schroeder D., Phillips S.J.;
Taylor B.A., Wnek C., Schroeder D., Phillips S.J.;
Twilliple obesity Otls identified in an intercross between the NZO (New Zealand obese) and the SM (small) mouse strains.";
Mamm. Genome 12:95-103(2001).
EMBL, AF286198; AAG01330.1;
InterPro; IPR001955; Pancreatic_hormn.
ProDom; PD001267; Pancreatic_hormn.
PROSITE; PS00265; PANCREATIC_HORMONE_1; UNKNOWN_1.
PROSITE; PS00265; PANCREATIC_HORMONE_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ovis aries (Sheep).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;

Bovidae; Caprinae; Ovis.
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                   Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 90;
                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Simmons J.M., Daniel J.A., Matteri R.L., Keisler D.H.;
Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases.
--: SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
EMBL; AF095781, AAC69886.1; --
HSSP; P01303; 1RON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90
9916 MW; 46FF2FB153EE5FFB CRC64;
                                                                                                                                                                                                                                                                                                                   SEQUENCE 89 AA; 9943 MW; AE6052615A59D96A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-WAY-2000 (TrEMBLrel. 13, Created)
01-WAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Neuropeptide Y (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 143; DB 6; Lendon No. 7.8e-12;
                                                                                                                                                                                                                                                                                                                                                                                    .,
.,
                                                                                                                                                                                                                                                                                                                                                  Score 143; DB 11;
Pred. No. 7.7e-12;
                                                                                                                                                                                                                                                                                                                                                                                                                  1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                     90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 73.7%; Score 143; DB Best Local Similarity 66.7%; Pred. No. 7.7e Matches 24; Conservative 7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 7.867; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMARY; SM00309; PAH; 1.
PROSITE; PS00265; PANCREATIC_HORMONE_1; 1.
PROSITE; PS50276; PANCREATIC_HORMONE_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR00195; Pancreatic_hormn.
Pfam; PF00159; hormones; 1.
PRIMTS; PR00278; PANCHORMONE.
Probom; PD001267; Pancreatic_hormn; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                              MEDLINE-21077529; PubMed-11210195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 73.7%;
Best Local Similarity 66.7%;
Matches 24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90
90 AA;
                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                            NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O9TSI6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
Q9TS16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
```

g

ò

g ò

```
Peptides 22:325-334(2001).

-!- FUNCTION: NPV IS IMPLICATED IN THE CONTROL OF PEEDING AND IN SECRETION OF GONADOTROPHIN-RELEASE HORMONE (BY SIMILARITY).

-!- SUBCELLULAR LOCATION: EXPRESSED THROUGHOUT THE BRAIN WITH HIGHEST LEVELS OF EXPRESSION IN MEDIAL LUM, BASAL FOREBRAIN, PREOPTIC AREA, MIDBRAIN TEGMENINA AND TRIGEMINAL NUCLEUS.

-!- SIMILARITY: BELONGS TO THE NPV / PPV / PVV FAMILY.

-!- SIMILARITY: BELONGS TO THE NPV / PPV / PVV FAMILY.

-!- SIMILARITY: BELONGS TO THE NPV / PVV / PVV FAMILY.

HSSP: P01303: 1RON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ebersole T.J., Conlon J.M., Goetz F.W., Boyd S.K.; "Characterization and distribution of neuropeptide Y in the brain of caecilian amphibian.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A., SEQUENCE OF 29-64, TISSUE SPECIFICITY, AND MASS
                                                                                                                                                                                               Ovis aries (Sheep).
Sukaryota: Metazoa: Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria: Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Caprinae; Ovis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Gymnophiona; Caeciliidae; Typhlonectes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                       [1]
SEQUENCE FROM N.A.
STRAINS-ILE DE FRANCE; TISSUE=HYPOTHALAMUS;
PILLON D., Bruneau G.;
"Nucleotide sequence of Ovine preproneuropeptide Y.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ417904; CAD10677.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6C2209A361CF8583 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                  Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 143; DB 6; I
Pred. No. 8.4e-12;
7; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NEUROPEPTIDE Y. POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Typhlonectes natans (Rio Cauca caecilian).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00265; PANCREATIC_HORMONE_1; PROSITE; PS50276; PANCREATIC_HORMONE_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00278; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
SMART; SM00309; PAH; 1.
Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DDA REPUBLICANT OF THE PROPERTY OF THE PROPERT
```

ö

```
NCBI_TaxID=8255;
                                                                                                                                                                                                                                                                                                         01-DEC-2001 (
01-DEC-2001 (
01-MAR-2002 (
                                                                                                                                                                                          23;
                                                                                                                                       Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         olivaceus.'
                                                                                                                                                                                                                                                                                                                                        Peptide Y.
                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                     Q90WF2
                                                                                                                                                                                                                                                                                                090WF2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                  RESULT 15
                                                                                                                                                                                                                                                                             Q90WF2
    δŏ
                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                               δò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ΩD
                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
  on pair of basic residues; Signal; Amidation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OppS46;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2001 (TrEMBLrel. 18, Last annotation update)
Neuropeptide Y, NPY-PANCREATIC polypeptide homolog.
Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
Bukaryota: Metazoa; Chordata: Craniata; Vertebrata: Chondrichthyes; Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes; Scyliorhinidae; Scyliorhinus.
                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Crániata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Neopterygii; Neopterygii; Rateleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes; Pleuronectoidei; Paralichthyidae; Paralichthys
                                                                                                                                                                                                                                                                                                                                                                    BY SIMILARITY.
AMIDATION (G-65 PROVIDE AMIDE GROUP)
(BY SIMILARITY).
9682E9D89DFFB1C7 CRC64;
                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                   97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tch 72.7%; Score 141; DB 13; Length 99; al Similarity 63.9%; Pred. No. 1.6e-11; 23; Conservative 8; Mismatches 5; Indels
                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                         Gulmitted (FEB-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AB05212; BAB62410.1; -- InterPro: IPROJUS5; Pancreatic_hormn. Ffam; PF00159; hormone3; 1. ProDom; PD001267; Pancreatic_hormn: 1. PROSITE; PS00265; PANCREATIC_HORMONE_1; UNKNOWN_1. PROSITE; PS02765; PANCREATIC_HORMONE_2; 1. SEQUENCE 99 AA; 11179 MW; 32F6C21217CB1984 CRC64;
                                                                                   Length
                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                  Score 141; DB 13;
Pred. No. 1.6e-11;
                     NEUROPEPTIDE Y.
                                                                                                                          1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                     1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36 AA.
                                                                                                                                                                                                  AA
                                                                                                      8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8; Mismatches
                                                                                                                                                                                                 66
                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                        Paralichthys olivaceus (Flounder).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=92396601; PubMed=1523163;
                                                               11275 MW;
                                                                                  72.78;
63.98;
                                                                                                                                                                                                                    01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2002 (TrEMBLrel. 20,
                                                                                                     23; Conservative
                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
Neuropeptide; Cleavage
SIGNAL 1 28
                     64
97
64
                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                             97 AA;
                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=8255;
              29
68
64
                                                                                                                                                                                                                                                                                                                                                           TISSUE-BRAIN;
                                                                                                                                                                                                                                                      Peptide YY.
                                                                                                                                                                                                                                                                                                                                                                                                    olivaceus."
                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE.
                              PROPEP
MOD_RES
                     PEPTIDE
                                                                                                                                                                                                090WF3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09PS46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
Q9PS46
                                                                                                                                                                             RESULT 13
 FT FT SO
                                                                                                                                             g
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
Conlon J.M., Bjenning C., Hazon N.; "Structural characterization of neuropeptide Y from the brain of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Paralichthys olivaceus (Flounder).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
Pleuronectoidei; Paralichthyidae; Paralichthys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kurokawa T., Suzuki T.;
"Development of neuropeptide Y related peptides in the digestive
organs during the larval stage of Japanese flounder, Paralichthys
                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 132; DB 13; Length 97;
Pred. No. 2.6e-10;
8; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                        Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases
                                          dogfish, Scyliorhinus canicula.";
Peptides 13:493-497(1992).
-!- SIMILARITY: BELONGS TO THE NPY / PPY / PYY FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam: PF00159; hormone3; 1.
ProDom: PD001267; Pancreatic_hormn: 1.
PROSITE; PS00265; PANCREATIC_HORMONE_2; 1.
SEQUENCE: PS50276; PANCREATIC_HORMONE_2; 1.
SEQUENCE: PS AA; 10929 MW; 8703D00393EF1E75 CRC64;
                                                                                                                                                                                                                                                                                                                                      36 AA; 4169 MW; 0D1715D0D9BD0DD6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                      Score 136; DB 13;
Pred. No. 2.5e-11;
                                                                                                           HSSP; P01303; IRON.
InterPro: IPR001955; Pancreatic_hormn.
Pfam; PF00159; hormone3; 1.
PRINTS; PR00128; PANCHORMONE.
ProDom; PD001267; Pancreatic_hormn; 1.
PR051TE; PS00265; PANCREATIC_HORMONE_1; 1.
PR051TE; PS00265; PANCREATIC_HORMONE_1; 1.
                                                                                                                                                                                                                                                                                                                                                                    70.1%; Scor.
63.9%; Pred. No. 2...
7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 YPIKPEAPGEDASPEELNRYYASLRHYLNLVTRQRY 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search completed: February 27, 2003, 14:37:28 Job time : 31 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AB055213; BAB62411.1; -. InterPro; IPR001955; Pancreatic_hormn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel. 19, TrEMBLrel. 19, (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. TISSUE=BRAIN;
```

THIS PAGE BLANK (USPTO)